

# An etymology of Australian bryophyte genera. 2 — Mosses

David Meagher

School of Botany, The University of Melbourne, Victoria 3010, Australia

## Introduction

'The question is,' said Alice, 'whether you can make words mean so many different things.'

'The question is,' said Humpty Dumpty, 'which is to be master—that's all.'

— Lewis Carroll, *Through the Looking Glass*, chapter 6

Most of the names of bryophyte genera are derived from Greek and Latin stems but also often from personal names, some of which have been obscured by the passage of time. This paper sets out as much as can be established about the true etymology of the names of all moss genera accepted for Australia (Flora of Australia 2006), and complements a similar paper on Australian liverwort and hornwort genera (Meagher 2008). For the sake of regional completeness I have also included moss genera known from New Zealand as listed by Fife (1995).

The etymologies of generic and species names are often included in floras, but they are rarely taken from the original sources and are very often wrong. Worse still are the attempts to 'translate' names into English, on the assumption that this will make things easier or more interesting for the beleaguered reader struggling with classical languages. Samuel Gray was probably the first major culprit in this regard, when he coined such idiocies as Stinking Naked-foot for *Gymnopus graveolens*, Gelatinous Hedgehog-stool for *Steccherinum ochraceum*, Fireproof Spring-moss for *Fontinalis antipyretica* and Mis-shapen Elisa for *Elisa distorta* (Gray 1821a), and replaced evocative and often instructive names with lifeless translations, such as Biting Stone-crop instead of Jack of the Buttery, and Odorous Spiraea instead of Meadow Sweet (Gray 1821b). In Gray's defence, he may have been encouraged by the efforts of 'A Botanical Society at Litchfield' in translating Linnaeus (Linné 1783). Johnson (1980) continued the tradition when she presented the world with more than 130 new 'English names based on the original scientific names' for mosses, including Mueller's Horizontal Tooth Moss for *Syrrophodon muelleri*, Dubious Bladder Moss for *Vesicularia dubyana* and Uncovered Nipple Moss for *Taxithelium instratum*.

Unfortunately it is not always easy to understand the original intentions of authors of the names included here, particularly William

## Abstract

The meanings of the names of the moss genera presently known from Australia are elucidated, with supporting evidence where possible from the authors of the names. Genera known from New Zealand but not Australia are included for regional completeness.

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Mitten, who named many moss genera but never explained his names directly. On the other hand, other major authors such as Samuel-Elisée von Bridel(-Brideri), Carl Müller (at Halle) and Wilhelm Schimper gave the etymologies for most of their names. Often the choice of name had little if anything to do with a feature that distinguished the genus from others, but merely related to some feature from which a convenient name could be constructed. Furthermore, the rationale for distinguishing a genus from others was very often at odds with modern concepts, and must be viewed only in an historical rather than systematic context.

Where possible I have gone to the original publication to determine the author's intention. If that has not been possible I have tried to locate the author's explanation in a later work, or an explanation by another bryologist in a contemporaneous publication. The *International Code of Botanical Nomenclature* (McNeill *et al.* 2006) fixes the earliest publication of valid names for mosses as the first edition of Johann Hedwig's *Species Muscorum Frondosorum* (Hedwig 1801), with the exception of *Sphagnum*, which is attributed to Linnaeus. But many of the genera attributed to Hedwig (1801) in the following list had already been coined by other authors. In those cases I have gone if possible to the original publication of the name.

De Vries (1951) and De Vries and Jacolev (1978) proved useful in deciphering unusual terms in German and French. Although I have not seen it, *Lexikon deutschsprachiger Bryologen* (Frahm & Eggers 2001) must also be very useful for translating German bryological texts. For simplicity the word stems are given here in anglicised Greek rather than classical Greek, and the aspirated *h* sound is included in the spelling of the stem where necessary, as in *hygros* and *rhodon*.

For Latin stems I have relied on Lewis (1891) and Marchant and Charles (1952), and for Greek stems I have relied on Bagster (1870) and Morwood and Taylor (2002). The older two of these references are particularly useful for understanding the intentions of earlier authors. Quotations are as in the original text, including italicisation and capitalisation. I have chosen not to translate quotations from other languages because to do so would introduce long pages of endnotes, and because I would like to encourage readers to make their own translations. Author

abbreviations follow Brummit and Powell (1992) and IPNI (2008).

## Etymologies

*Acanthorrhynchium* M.Fleisch. 1923 — *akanthos* (spine) + *rrhynchos* (bill, beak), referring to the long beak of the operculum. The name was a replacement for *Acanthodium* Mitt. 1868, which Max Fleischer pointed out was already in use for a genus of vascular plants, *Acanthodium* Delile 1813 (Fleischer 1923: 1331).

*Acaulon* Müll.Hal. 1847 — *a-* (without) + *kaulon* (stalk), alluding to the very short, seemingly stemless plants: 'Nomen ob humilitatem congenerum magnam impositum.' (Müller 1848: 21).

*Achrophyllum* Vitt & Crosby 1972 — *achroma* (colourless) + *phyllon* (leaf). 'The name *Achrophyllum* refers to the almost colourless nature of the leaves of the type species.' (Vitt & Crosby 1972: 174). *Achrophyllum* replaced Bridel's illegitimate name *Pterygophyllum*.

*Acrocladium* Mitt. 1869 — *akros* (pointed; at the tip or top) + *klados* (stem, branch), probably alluding to the cuspidate and imbricate leaves at the tips of the branches — 'foliis...in ramorum apicibus cuspidatum imbricatis' (Mitten 1869: 531). The name might also be a clever double-meaning, referring also to the occasional rooting of the tips of the branches in *A. auriculatum* (Mont.) Mitt., which William Mitten stressed in his diagnosis and commentary: 'ramulis apicibus interdum descrescentibus radicanibus' (Mitten 1869: 532).

*Acroporium* Mitt. 1868 — *akros* (pointed; at the tip or top) + *poros* (perforation, passage, tube), undoubtedly referring to the inrolling of the upper margins of the leaves: 'margine versus apicem involuta' and 'marginibus superne involutis integerrimis' (Mitten 1868: 183).

*Aerobryopsis* M.Fleisch. 1905 — genus *Aerobryum* + *opsis* (similar to), alluding to the similarity to that genus, some species of which were transferred by Fleischer to his new genus. *Aerobryum* comes from *aer* (air) + *bryon* (moss), referring to the typical habit of the plants, dangling in skeins from the branches of trees.

- Aloina* Kindb. 1882 — *Aloe* (a liliaceous genus) + *-ina* (resembling), referring to 'the fleshy nature of the leaves, which suggest those of an *Aloë*' (Crum & Anderson 1981). The name was first proposed by Carl Müller for a section of the genus *Barbula* and was conserved over the earlier *Aloidella* (De Not.) Venturi 1868 by the action of the Botanical Congress of 1930 (Delgadillo 1975: 246).
- Amblystegium* Schimp. 1853 — *amblys* (blunt) + *stegion* (roof, covering), referring to the shape of the operculum: 'Operculum magnum tumido-conicum obtusum (unde nominis ratio, αμβλυσ obtusus)' (Schimper 1860: 587).
- Ambuchanania* Seppelt & H.A.Crum 1999 — After Alex M. Buchanan, Tasmanian naturalist, who collected the type of the only member of the genus, *A. leucobryoides*, from Port Davey (Crum & Seppelt 1999: 29).
- Amphidium* Schimp. 1856 — A revised name based on *Amphoridium*, from *amphora* (urn), alluding to the shape of the capsule. The name *Amphoridium* was first published by A.B. Massalongo in 1853 for a genus of lichens, so Wilhelm Schimper republished his bryophyte genus as *Amphidium*. Schimper's name was subsequently conserved against *Amphidium* Nees 1819 (Magill 1993: 6).
- Anacamptodon* Brid. 1819 — *anakamptos* (bent back) + *odon* (tooth), alluding to the reflexed outer peristome teeth (Bridel 1827: 225), 'a feature made striking because of a suboral constriction of the capsule' (Crum & Anderson 1981).
- Andreaea* Hedw. 1801 — After Johann Gerhard Reinhard Andreä (1724–1793), chemist and court apothecary in Hannover. The name is attributed to Hedwig under the Code but was first coined by Johann Erhardt: 'Es ist diefer Menschenfreund der hiesige Apotheker, Herr J. G. R. Andreae, welcher durch seine gründliche Kenntnisse in allen Theilen der Naturgeschichte, und Bemühungen zur Ausbreitung nützlicher Wissenschaften einem jeden bekannt ist.' (Erhardt 1787: 16). Andreä's surname is often stated as Andreae, which is the Latinised form that he used in his profession and on which the genus name is based.
- Anisothecium* Mitt. 1869 — *anisos* (unequal, different) + *thekion* (little vessel, container). In Mitten's generic diagnosis and descriptions of species there is no indication of what this refers to (Mitten 1869: 39), but it is probably the difference in the capsules from those of *Dicranum*, from which *Anisothecium* was separated.
- Anoetangium* Schwägr. 1811 — *anoikto* (open) + *angion* (vessel), alluding to the lack of a peristome ('Peristomium nullum') (Schwägrichen 1811: 33). It seems Dixon (1954: 255) was not quite correct in suggesting that it referred to 'the wide-mouthed capsule in some species'. The name is conserved against *Anictangium* Hedw. 1801 (= *Hedwigia* P.Beauv.).
- Anomobryum* Schimp. 1860 — *anomos* (anomalous) + *bryon* (moss). Schimper's diagnosis suggests that he regarded his type species *Anomobryum julaceum* as anomalous when placed in *Bryum*, particularly because the cells in the upper leaf are hypnoid (i.e. long and narrow). 'Characteribus supra expositis facile ab omnibus *Bryaeis* europaeis distinguitur' (Schimper 1860: 382).
- Anomodon* Hook. & Taylor 1818 — *anomos* (anomalous) + *odon* (tooth). William Hooker and Thomas Taylor erected the genus to separate two species from *Neckera*, because they believed that their ciliate inner peristome teeth arose from the teeth of the outer peristome, unlike 'the true *Neckerae*' (Hooker & Taylor 1818: 79). The genus stands despite this concept being shown to be false: 'In the older sense, the genus *Anomodon* includes various species which are now classified in other genera.' (Iwatsuki 1963).
- Archidium* Brid. 1826 — *archidion* (primitive), alluding to Bridel's view that these were the earliest of all mosses: 'huic generi totius muscorum gentis primordio impositum' (Bridel 1826–27: 747), a view apparently not shared by Carl Müller, who exclaimed 'ex auctoris ratione!' (Müller 1848: 13).
- Arthrocormus* Dozy & Molk. 1846 — *arthros* (jointed) + *cormos* (stem), alluding to the unusual jointed appearance of the branches: 'Ramificatione sua peculiari, foliorum dispositione exacte trifaria et organorum plurimorum forma trigona hocce



genus ab aliis facile distinguitur...' (Dozy & Molkenboer 1846: 76).

*Astomum* Hampe 1837 — *a* (without) + *stoma* (opening), alluding to the cleistocarpous capsule. Hampe's three-word diagnosis ('*Phasca angustifolia perennia*') (Hampe 1837: 285) — surely the shortest yet known for any species — was enough to ensure valid publication of the name.

*Atrichum* P.Beauv. 1804 — *a-* (lacking) + *trichos* (hair), from the almost complete lack of hairs on the calyptra, unlike other genera of Polytrichaceae: 'Coeffe...garnie au sommet de quelques poils courts et rares' (Palisot de Beauvois 1804: 329). The name is conserved against *Catharinea* Ehrh. ex D.Mohr 1803.

*Aulacomnium* Schwägr. 1827 — *aulacos* (furrow) + *mnion* (moss), alluding to the furrowing of the capsule when mature: 'Capsula sulcata' (Schwägrichen 1827: 51). The name is conserved against *Gymnocephalus* Schwägr. 1816, which Schwägrichen (who attributed the name to Hedwig) rejected on the basis that it was already in use (Schwägrichen 1827: 52). (Note that the pages in Schwägrichen (1827) were not numbered; the numbers given here refer to the folio number, as if the pages had been numbered.)

*Barbella* (Müll.Hal.) M.Fleisch. ex Broth. 1905 — Latin *barba* (beard) + diminutive suffix *-ellus*; 'The name makes reference to the long, slender, secondary stems forming graceful, pendent, beardlike masses.' (Crum & Anderson 1981). It was first suggested by Carl Müller (1896: 464) for a section of *Pilotrichella*.

*Barbellopsis* Broth. 1929 — *Barbella* + *opsis* (similar to), reflecting its affinity to *Barbella*: 'Ge[n]us novum *Barbellae* Fleisch. affine, sed foliorum cellulis alaribus numerosis quadratis diversum' (Brotherus 1929: 83).

*Barbula* Hedw. 1801 — Diminutive form of Latin *barba* (beard), alluding to the hairy appearance of the peristome: 'Peristomium simplex: dentibus capillaribus, spiraliter convolutis.' (Hedwig 1801: 115). The name is conserved against *Barbula* Lour. 1790 (Verbenaceae).

*Bartramia* Hedw. 1801 — After John Bartram (1699–1777), American colonist and botanist (Little 1941:

109). Bartram was appointed Royal Botanist in America, cofounded with Benjamin Franklin the American Philosophical Society, and was called by Linnaeus 'the greatest natural botanist in the world' (IHA 2007). Hedwig first published the name in 1789, although Linnaeus and Salisbury had both used it previously for vascular plants (Little 1941: 108). The name is conserved against *Bartramia* L. 1753 (Tiliaceae). Compare with *Bryobartramia*.

*Beeveria* Fife 1992 — A name honouring Jessica Beever, New Zealand bryologist in Auckland, noted in particular for the second edition of *The Mosses of New Zealand* (Beever *et al.* 1991) and her studies on *Fissidens* in Australasia, but also for many other contributions to our knowledge of mosses in the region. Allan Fife separated the single species, *B. distichophylloides* (Broth. & Dix.) Fife, from *Achrophyllum*.

*Bescherellia* Duby 1873 — After French botanist Émile Bescherelle (1826–1903), who worked mainly in New Caledonia and Mexico and wrote *Prodromus Bryologicae Mexicanae*: 'Genus cl. Aemilio Bescherelle, de bryologia mexicana et neo-caledonica optime merenti, dicatum.' (Duby 1873: 130).

*Blindia* Bruch & Schimp. 1846 — After J.J. Blind, pastor and botanical collector in Münster in the Vosges region of Germany from 1834 to 1848: 'Nomen in honorem reverend. Blind Vogesi superioris acutissimi investigatoris' (Schimper 1860: 119).

*Brachydontium* Fűrnr. 1827 — *brachy* (short, stout) + *odon* (tooth), alluding to the imperfect peristome in which the teeth are often truncated. Fűrnrrohr also published the name as *Brachyodon* and *Brachyodus*, which are both illegitimate because they are orthographic variants.

*Brachymenium* Schwägr. 1824 — *brachy* (short, stout) + *hymen* (membrane), alluding to the short basal membrane (Bridel 1826–27: 601). Spence & Ramsay (2006) gave the second stem as *meninx* (membrane), but that would result in the name *Brachymeningium*.

*Brachytecium* Schimp. 1853 — *brachy* (short, stout) + *thekion* (little vessel, container), alluding to the rather short, fat capsule: 'Capsula...pro more



crassiuscula (unde nomen, βαρυ crassum)' (Schimper 1860: 531).

*Braithwaitea* Lindb. 1872 — After Robert Braithwaite (1824–1917), Yorkshire-born English physician and bryologist in London, best known in bryology for his three-volume illustrated *British Moss-flora* (1880–1905).

*Breutelia* (Bruch & Schimp.) Schimp. 1856 — After Johann Christian Breutel (1788–1875), bishop and botanical collector in Herrnhut and missionary in the West Indies and South Africa: 'Genus hoc nitidissimum, amicissimo Chr. Breutel, insul. St. Kitts et St. Thomas nec non Capitis b. spei perscrutatori, bryologo praestantissimo dicatum...' (Schimper 1860: 428).

*Bruchia* Schwägr. 1824 — After Philipp Bruch (1781–1847), 'pharmaceuta meritissimo, qui plantas Bipontii et Germaniae occidentalis sedulo colligit et acute observat' (Schwägrichen 1824: 91). Bruch was an apothecary and botanist in Zweibrücken, and with Wilhelm Schimper wrote the multi-volume *Bryologica Europaea*.

*Bryobartramia* Sainsb. 1948 — *bryon* (moss) + *Bartramia*, after Edward Bunting Bartram (1878–1964), American bryologist and descendant of John Bartram (see *Bartramia*). 'I take great pleasure in naming the family and genus after Mr E.B. Bartram to whom I am indebted for assistance in the study of the plant...' (Sainsbury 1948: 13).

*Bryobeckettia* Fife 1985 — *bryon* (moss) + *Beckett*, a name honouring Thomas Wrench Naylor Beckett (1839–1906), New Zealand orchardist and bryologist in Fendalton, 'a meticulous student of the mosses of New Zealand' (Fife 1985: 191). Beckett arrived in New Zealand in 1883 from Ceylon, where he had been a coffee planter (Godley 1997: 19) and botanical collector. He had already made significant plant collections in South Africa, Ceylon and the Himalaya, and his collections are contained in many herbaria around the world (Desmond 1994: 60).

*Bryobrothera* Thér. 1920 — After Viktor Ferdinand Brotherus (1849–1929), Finnish botanist and bryologist, pupil of S.O. Lindberg and friend of French bryologist Irénée Thériot (1859–1947)

+ *bryon* (moss). 'Je suis heureux de dédier ce nouveau genre à mon savant ami V. F. Brotherus qui, le premier, en a eu l'intuition et dont les travaux ont puissamment aidé à faire connaître la flore bryologique de notre belle colonie du Pacifique.' (Thériot 1920: 27).

*Bryodixonia* Sainsbury 1945 — *bryon* (moss) + *Dixon*, a name honouring Hugh Neville Dixon (1861–1944), celebrated English bryologist in Northampton, noted in particular for *The Student's Handbook of British Mosses* (1896) reprinted several times and the standard text on the subject for more than a century. Dixon contributed dozens of papers on mosses as well as many other botanical subjects, and also wrote the book *Studies in the Bryology of New Zealand* (1929). See Bartram (1944) for a wonderful eulogy.

*Bryoerythrophyllum* P.C.Chen 1941 — *bryon* (moss) + *erythros* (red) + *phyllon* (leaf), 'referring to the brick-red colour of the most widespread species, *B. recurvirostrum*' (Crum & Anderson 1981). Zander (1986) noted that a reddish colouration is typical of the genus generally.

*Bryostreimannia* Ochyra 1991 — A name honouring Heinar Streimann (1938–2001), Estonian–Australian bryologist who collected the type (Ochyra 1990) + *bryon* (moss). Streimann was well known for his exsiccatae of Australian mosses, and for his contributions to our knowledge of Australian Hookeriaceae and the bryoflora of Norfolk Island. The name replaced *Streimannia* Ochyra, a later homonym of a lichen genus also named after Heinar Streimann.

*Bryum* Hedw. 1801 — *bryon*, an ancient name for an unidentified bryophyte, derived apparently from *bruein* (to swell, sprout or burgeon) (Scott 1988: 1).

*Buxbaumia* Hedw. 1801 — After Johann Christian Buxbaum (1693–1730), German botanist and professor in Petersburg, who in 1712 collected the type for the genus, *Buxbaumia aphylla*, on the banks of the Volga not far from Astrakhan (Greville & Arnott 1823–24: 86). Buxbaum had wanted to name the plant after his father, as Jean Marchant had done for *Marchantia*, but recalled the fox who was derided because he begged for grapes, not

for himself but for his sick mother (Buxbaum 1728: 9). Instead he called it *Muscus capillaceus aphyllus*, *capitula crasso*, *bivalvi*. The name *Buxbaumia* was eventually given in honour of the younger Buxbaum by botanist and poet Albrecht von Haller in his *Enumeratio* (Haller 1742: 10), apparently thinking it was a fungus. Hedwig (1801: 166) and others attributed the name to Linnaeus, but he merely resurrected the name given by Haller after Girolamo Fabrici (Fabricius) had changed it to *Hippopodium*.

*Caduciella* Enroth 1991 — Latin *caducus* (falling easily) + diminutive suffix *-ellus*, alluding to the fragile leaves of the only species, *Caduciella mariei* — 'Stems to ca 2.5 cm long, erect, distal parts often naked due to caducous leaves' (Enroth 1991: 612).

*Callicostella* (Müll.Hal.) Mitt. 1859 — Latin *callosus* (thick) + *costa* (rib) + diminutive suffix *-ellus*, alluding to the thick (in transverse section) costa: 'nervis callosis' (Müller 1851: 216). Müller coined the name for a section of *Hookeria*, in which he placed *H. callicostata* Müll.Hal., *H. papillata* Mont. and numerous other species. Mitten raised the section to generic rank on the basis of the difference in leaf structure, but transferred only *H. papillata*. The name is conserved against *Schizomitrium* Schimp. 1851 (Magill 1993: 12).

*Calliergidium* (Renauld) Grout 1931 — Genus *Calliergon* + Greek diminutive suffix *-idion*, alluding to the similarity to that genus. Renauld (1902: 64) first coined the name for a subgenus of *Hypnum* to replace his illegitimate name *Pseudo-cal[li]ergon*, a later homonym of *Pseudo-calliergon* Limpr. Although he used the word 'propose' in that paper he clearly accepted and adopted the new name, transferring to it four species of *Hypnum*. Article 34.1 of the Code therefore does not apply in this case, and the authorship as given here is correct. Wynne (1945: 134) rejected the genus because she found that the types of species it comprised were identical to species in other genera described earlier. However, the genus stands in the New Zealand flora because Bartram (1946: 317) transferred *Hypnum austro-stramineum* Müll.Hal. to it.

*Calliergonella* Loeske 1911 — Genus *Calliergon* + Latin diminutive suffix *-ellus*, a name that William

Sullivant coined for a section of *Hypnum* (Sullivant 1856: 72) presumably from *kallos* (fine, beautiful) + *ergon* (work), alluding to 'good or pretty workmanship, to an elegance of appearance' (Crum & Anderson (1981: 101). Loeske included in his new genus only one species, *Calliergonella [Calliergon] cuspidata* (Hedw.) Loeske (Loeske 1911: 248).

*Calomnion* Hook.f. & Wilson 1854 — *kalos* (beautiful) + *mnion* (moss), a simple descriptive name, although Hooker and Wilson did not state their etymology.

*Calymperastrum* I.G.Stone 1986 — *Calymperes* + Latin *astrum* (star), alluding to the earlier placement of the type (*C. latifolium*) in *Calymperes* and, although Ilma Stone did not say as much, to the star-like appearance of the plants.

*Calymperes* Sw. 1814 — *kalymma* (covering, veil) + *peres* (going beyond), 'so named because the calyptra forms a covering which surpasses (and encloses) the capsule' (Crum & Anderson 1981).

*Calyptopogon* (Mitt.) Broth. 1902 — *kalyptos* (enveloping) + *Streptopogon*, alluding to the large, smooth calyptra that completely covers the capsule, and the original placement as a section in *Streptopogon*. The capsule is exserted above the perichaetial leaves, so the name clearly does not refer to an immersed capsule as has been suggested elsewhere (compare *Calyptothecium*).

*Calyptothecium* Mitt. 1868 — *kalyptos* (enveloping) + *thekion* (little vessel, container), from the almost sessile capsule immersed in the perichaetial leaves: 'Theca aequalis, fere sessilis, perichaetio immersa...' (Mitten 1868: 190). The calyptra is small, so the name cannot refer to a large calyptra covering the capsule, as is sometimes suggested.

*Calyptrochaeta* Desv. 1825 — *kalyptra* (covering, veil) + *chaite* (hair, bristle), alluding to the hairy calyptra: 'Coiffe campaniforme velue' (Desvaux 1825: 226). Desvaux coined the name to replace *Chaetophora* Brid., a later homonym of *Chaetophora* Nutt. (Asteraceae).

*Camptochaete* Reichardt 1870 — *kamptos* (bent, altered) + *chaite* (hair, bristle), I think alluding to the curved seta: 'durch die kurzen gekrümmten Fruchstiele' (Reichardt, in Fenzl 1870: 191).



- Campylium* (Sull.) Mitt. 1869 — *kampylos* (bent), alluding to the typically squarrose leaf acumen, a feature that subsequently led some workers to include unrelated species in this genus (Hedenäs 1997). The name was first applied by William Sullivant in 1856 to a section of *Hypnum*: 'leaves suddenly long-acuminate from a broadly ovate base, subsquarrose' (Sullivant 1856: 77).
- Campylopodium* (Müll.Hal.) Besch. 1873 — from genus *Campylopus*, alluding to the similarity of the seta to that in *Campylopus*: 'Plantae *Campylopodibus* similimae pedunculis cygneo-recurvis' (Müller 1848: 429). Carl Müller first coined the name for a section of *Aongstroemia* Bruch & Schimp.
- Campylopus* Brid. 1819 — *kampylos* (bent) + *pous* (foot), alluding to the flexuose seta: 'ob setas in tota hac gente flexuosas, madore arcuatas' (Bridel 1826–27: 468).
- Catagonium* Müll.Hal. ex Broth. 1908 — *kata* (downwards) + *gone* (seed), alluding to the inclined capsule: 'Kapsel geneigt' (Brotherus 1905–09: 1087). Müller (1896: 468) did not give a diagnosis when he first attempted to erect the genus to encompass two Hawaiian species.
- Catharomnion* Hook.f. & Wilson 1855 — *katharos* (neat) + *mnion* (moss), alluding simply to the tidy appearance of the plants: 'Name from καθαρος, neat.' (Wilson 1854–55: 119).
- Ceratodon* Brid. 1826 — *keras* (horn) + *odon* (tooth), from the resemblance of the peristome teeth to the horns of a goat: 'dentes inflexione sua et trabeculis nodulosis caprae cornua referant' (Bridel 1826–27: 480).
- Chaetomitrium* Dozy & Molk. 1846 — *chaite* (hair, bristle) + *mitra* (head-dress), alluding to the densely hairy calyptra: 'Calyptra conico-mitraeformis, setosa, laciniata, pilis copiosis deflexis fimbriata.' (Dozy & Molkenboer 1846: 117).
- Chenia* R.H.Zander 1989 — After Pan-Chieh Chen (1907–1970), Chinese bryologist and teacher. He was the chief compiler of volume II of *Genera Muscorum Sinicorum* and worked on the taxonomy of East Asian Pottiaceae.
- Chorisodontium* (Mitt.) Broth. 1924 — *chorisos* (separated, distant) + *odontos* (toothed), alluding to separation of the peristome teeth at their bases: 'Peristomii dentes ad basin usque discreti' (Mitten 1869: 62). William Mitten originally coined the name for a section of *Dicranum*.
- Chrysoblastella* R.S.Williams 1903 — *chrysos* (golden) + *blaste* (bud) + Latin diminutive suffix *-ellus*, referring to the golden-yellow colour of the plants.
- Cladomnion* Hook.f. & Wilson 1854 — *klados* (branch) + *mnion* (moss), alluding to the bipinnate branching: 'We separate the following [species] from *Leskea* and *Neckera* on account of the habit of growth, and the strong resemblance of the fruit to that of *Leucodon*.' (Hooker & Wilson 1854: 99).
- Claopodium* (Lesq. & Jam.) Renaud & Cardot 1893 — probably from *klao* (I weep) + *pous* (foot), alluding to the weeping (pendent) capsule: 'Capsule turgid, abruptly bent down at the base of the collum...' (Lesquereux & James 1884: 317). The name was coined by Lesquereux and James for a subgenus of *Hypnum* comprising five species. It has been suggested that the first stem is *klao* (to break off), but that makes no sense in relation to the original description and the characters outlined there.
- Clastobryum* Dozy & Molk. 1846 — *klastos* (broken) + *bryon* (moss) alluding to the great fragility of the generitype, *Clastobryum indicum*: 'Caulis...admodum fragilis subaphyllus seu foliorum vetustumum vestigis...' (Dozy & Molkenboer 1846: 45).
- Climacium* F.Weber & D.Mohr 1804 — *klimax* (staircase, ladder), 'alluding to the appearance of the processes of the inner peristome, the two halves of which are regularly united by projections between the perforations, giving somewhat the appearance of a ladder' (Dixon 1954). 'Peristomium...cruribus per trabes apiceque connexis' (Weber & Mohr 1807: 252).
- Conostomum* Sw. 1804 — *konos* (cone) + *stoma* (mouth), alluding to the fusing of the tips of the peristome teeth to form a cone (Bridel 1826–27: 150; Schimper 1860: 422; Crum & Anderson 1981: 641).
- Coscinodon* Spreng. 1804 — *koskinon* (sieve) + *odon* (tooth), alluding to the sieve-like peristome teeth: 'peristomii dentes...majusculi, late lanceolati,



- remote articulati, pro more valde cribrosi (unde generis nomen κοσκινον cribrum et οδον dens)' (Schimper 1860: 242).
- Cratoneuropsis* (Broth.) M.Fleisch. ex Broth. 1923 — *Cratoneuron* + *opsis* (similar to), alluding to the similarity to that genus. The name *Cratoneuron* is from *kratos* (strong) + *neuron* (nerve), alluding to the strong costa: 'costa stout, subcontinuous' (Sullivant 1856: 73).
- Crosbya* Vitt 1977 — A name honouring Marshall Crosby, U.S. bryologist at the Missouri Botanical Garden, noted expert in the systematics of mosses.
- Crossidium* Jur. 1882 — *krossoi* (fringe) + diminutive suffix *-idion*, alluding to 'the dense fringe provided by filaments covering the costa in the upper part of the leaf' (Crum & Anderson (1981: 356). The name is conserved against *Chloronotus* Venturi 1868.
- Cryphaea* D.Mohr & F.Weber 1814 — *krypha* (secret, hidden), a variant of *kryptos*, alluding to the immersed capsules, more or less hidden by the perichaetial leaves: 'ob capsulas in perichaetio latitantes' (Schimper 1860: 462).
- Cryptogonium* (Müll.Hal.) Hampe 1880 — *kryptos* (hidden) + *gone* (seed), alluding to the position of the capsules, immersed in the perichaetial leaves (Müller 1874: 69).
- Ctenidium* (Schimp.) Mitt. 1869 — *ktenos* (comb) + diminutive suffix *-idion*, alluding to the neat, comb-like appearance of the branching: 'ramosae confertim et regulariter pinnato-ramulosae ita ut in utroque caulis latere eleganter pectinatae videantur (unde nomen)' (Schimper 1860: 631). Schimper coined the name for a subgenus of *Hypnum* comprising a single species, *H. molluscum* Hedw.
- Cyathophorum* P.Beauv. 1804 — *kyathos* (wine ladle, cup) + *phoreos* (to bear), referring to the shape of the capsule: 'gaine longue, cylindrique, très-ouverte, cyathiforme' (Palisot de Beauvois 1804: 324).
- Cyclodictyon* Mitt. 1864 — *kyklos* (circle) + *diktyon* (net), alluding to the supposedly rounded leaf cells: 'They differ from the *Hookeria*...and *Lopidium*... in the large rounded cells of their leaves' (Mitten 1864: 163–164).
- Cyrtodon* (Broth.) Paris & Schimp. 1914 — *kypto* (procumbent) + *odon* (tooth), alluding to the more or less horizontal peristome teeth: 'propter dentes (coriaceos) vivos madefactosve peristomi orificium capsulae fere horizontaliter obtegentes' (Paris & Schimper 1914: 310). Brotherus first coined the name for a subgenus of *Cryphaea*, noting 'Zähne des äußeren [Peristom] feucht fast horizontal einwärtsgebogen' (Brotherus 1905–09: 743).
- Cyrtopus* (Brid.) Hook.f. 1867 — *kyrtos* (curve, bend) + *pous* (foot), referring to the curved seta: 'pedunculo subarcuato' (Bridel 1926–27: 235). Bridel originally coined the name for a section of *Neckera*.
- Daltonia* Hook. & Taylor 1818 — After James Dalton (1764–1843), British clergyman, botanist and bryologist in Yorkshire. 'With much pleasure we here offer our tribute of affectionate regard to our valued friend, the Rev. James Dalton, by whose muscological communications we have frequently profited during the collection of the materials for the present volume.' (W.J. Hooker & Taylor 1818: 80). The name is not, as is sometimes claimed, related to his grandson, James Dalton (d. 1862). The name is conserved under the Code.
- Dawsonia* R.Br. 1811 — After Dawson Turner (1775–1858), banker, botanist, antiquarian and artist, a close friend of Robert Brown: 'I have named this remarkable genus in honour of my esteemed friend Dawson Turner, Esq., a gentleman eminently distinguished in every part of Cryptogamic botany, and from whom, after he has finished the incomparable work on *Fuci*, in which he is now engaged, we may expect a general history of Mosses.' (Brown 1811: 318). Turner died on 20 June 1858, ten days after Brown.
- Dendrocryphaea* Paris & Schimp. ex Broth. 1905 — *dendron* (tree) + *Cryphaea*, alluding to the habitat of the species.
- Dendroligotrichum* (Müll.Hal.) Broth. 1905 — *dendros* (tree) + *oligos* (few, little) + *trichos* (hair, bristle), alluding to the great size and dendroid habit, and the sparse hairs on the calyptra: 'Plantae saepe giganteae' (Müller 1849: 199).
- Dichelodontium* Hook.f. & Wilson ex Broth. 1907 — *dichelos* (two-headed arrow) + *odontos* (toothed),

- alluding to the half-split peristome teeth. The name was coined by Joseph Hooker and William Wilson in relation to *Leucodon nitidus* Hook.f. & Wilson: 'if ever generically separated we propose the name *Dichelodontium*' (FI NZ 2: 99). Brotherus followed their lead in separating the species from *Leucodon*.
- Dicnemon* Schwägr. 1824 — *diken* (in the manner of, like) + *kneme* (leg bone). Although Schwägrichen (1824: 126) noted merely 'α κνημη, crus' (i.e. 'from *kneme*, leg bone'), it is clear that the name refers to the peculiar shape of the capsule, whereby a basal projection gives it the appearance of the head of a femur.
- Dicranella* (Müll.Hal.) Schimp. 1856 — Genus *Dicranum* + Latin diminutive suffix *-ellus*. Carl Müller coined the name for a section of *Aongstroemia* Bruch & Schimp., comprising three species previously included in *Dicranum* Hedw. The name is conserved under the Code.
- Dicranoloma* (Renauld) Renauld 1901 — Genus *Dicranum* + *loma* (border), alluding to the border of narrow, elongate cells on the leaf margin: 'limbum hyalinum 23–35 μ latum, 3–5-seriatum, ultra folii medium productum efformatibus' (Renauld & Cardot 1915: 70).
- Dicranoweisia* Lindb. ex Mild. 1869 — Compounded form of *Dicranum* and *Weisia* (a variant of *Weissia*); 'The name reflects a relationship to *Dicranum* and some resemblance to *Weissia*' (Crum & Anderson 1981). See *Weissia* for a discussion on the variant spelling.
- Dicranum* Hedw. 1801 — *dikranos* (two-pronged fork), relating to the divided peristome teeth: 'Peristomium simplex; dentibus sedecim brevioribus, inflexis, bifidis.' (Hedwig 1801: 126).
- Didymodon* Hedw. 1801 — *didymos* (twofold) + *odon* (tooth), referring to the division of the peristome teeth: 'Denticulorum linearium sedecim paria basi non connexa.' (Hedwig 1801: 104).
- Diphyscium* D.Mohr 1803 — *di* (two) + *physcion* (vesicle), 'the wide separation of the thecal and sporangial membranes giving the appearance of one vesicle inside another' (Sullivant 1856: 40).
- Distichium* Bruch & Schimp. 1846 — *distichos* (in two rows), alluding to the arrangement of the leaves: 'Nomen α διστιχος, bifarius, ob foliorum dispositionem bifarium.' (Schimper 1860: 135). The name is conserved against *Cynodontium* Hedw. 1801.
- Distichophyllum* Dozy & Molck. 1846 — *distichos* (in two rows) + *phyllon* (leaf), alluding to the apparently distichous (but in fact complanately flattened) arrangement of the leaves: 'Folia...laterali disticha subhorizontalia' (Dozy & Molkenboer 1846: 100).
- Ditrichum* Hampe 1867 — *di* (two) + *trichos* (hair), referring to the filiform, divided peristome teeth: 'Peristoma simplex: Dentes 33. filiformes per paria approximati, basi non coherente' (Timm 1788: 216). The genus was erected by Timm before the starting date for moss nomenclature, but the name is preserved because Hampe republished it to replace his own synonymous *Leptotrichum* (Hampe 1867: 181). The name is conserved against *Ditrichum* Cass. 1817, *Diaphanophyllum* Linb. 1863, *Aschistodon* Mont. 1845, *Lophiodon* Hook.f. & Wilson 1844 and *Trichodon* Schimp. 1856.
- Drepanocladus* (Müll.Hal.) G.Roth 1899 — *drepanon* (sickle) + *klados* (branch, shoot), alluding to the appearance of the falcate-secund leaves: 'folia distincte falcata uncinata' (Müller 1851: 321). Roth (1899: 6) raised Müller's section of *Hypnum* to generic rank. The name is conserved against *Drepanocladus* Müll.Hal. 1898 and *Drepanohypnum* Hampe 1872.
- Eccremidium* Wilson 1846 — *ekkreinos* (pendulous) + diminutive suffix *-idion*, referring to the pendulous capsule: 'the new generic name, *Eccremidium*, is proposed for a genus characterised by the short, thick, arcuate seta, and pendulous capsule' (Wilson 1846a: 450–451).
- Echinodium* Jur. 1866 — *echinos* (hedgehog) + diminutive suffix *-idion*, alluding to the spiky appearance of the plants, which have long, stiff, widely spreading leaves.
- Ectropothecium* Mitt. 1868 — *ektrope* (turned aside) + *thekion* (little vessel, container), alluding to the capsule: 'The capsule is in all the species...perfectly pendulous when old, supported on a long seta, curved only at its apex' (Mitten 1868: 180).



- Encalypta* Hedw. 1801 — *en* (within) + *kalyptos* (enveloping), clearly alluding to the remarkably large calyptra which covers and extends below the capsule.
- Entodon* Müll.Hal. 1845 — *entos* (inside) + *odon* (tooth), alluding to the insertion of the outer peristome teeth inside the capsule mouth: 'Peristomium duplex. Externum: Dentes...intra orificium orientes' (Müller 1845: 704).
- Entosthodon* Schwägr. 1823 — *entosthen* (inside) + *odon* (tooth); 'Nomen ab εντοσθεν, intus: et οδονς, dens' (Schwägrichen 1823: 44), that is, alluding to the position of the inner peristome, well below (and thus inside) the mouth of the capsule.
- Ephemeropsis* K.I.Goebel 1892 — *Ephemerum* + *opsis* (similar to), alluding to the resemblance to that genus.
- Ephemerum* Hampe 1837 — *ephemerous* (short-lived), alluding to the supposed ephemeral life cycle of the plants (Hampe 1837: 98). The name is conserved against *Ephemerum* Mill. 1754 (Commelinaceae).
- Epipterygium* Lindb. 1862 — *epi* (almost, near) + *pterygion* (little wing), presumably referring to the appearance of the upper leaves, which are almost distichous and resemble wings, somewhat like *Mittenia*. The genus has been treated as a section of *Bryum*, *Pohlia* and *Webera* and a subgenus of *Bryum* by various authors.
- Eriodon* Mont. 1845 — *eriodon* (with large teeth), alluding to the very long peristome teeth: 'Nomen ex εριοδον, magnos habens dentes, ductum' (Montagne 1845: 98).
- Eriopodium* (Brid.) Brid. 1827 — *erpo* (creeping), a name 'appropriately chosen, in the context of the original publication, as a subgeneric division of *Anoetangium*' (Crum & Anderson 1981). Bridel (1827: 167) published the name as a subgenus of *Anoetangium* characterized by creeping stems ('caule repente'), but raised it to generic rank on page 788 of the same work. In the absence of capsules members of this genus might be passed over as a member of the liverwort family Lejeuneaceae. Indeed, *E. biseriatum* was originally named *Lejeunia* [*Lejeunea*] *biseriata* by Austin, 'an astute bryologist' (Crum & Anderson 1981).
- Eucamptodon* Mont. 1845 — *eu-* (well, finely) + *kamptos* (bent, altered) + *odon* (tooth), alluding to the strongly incurved peristome teeth of the type, *E. perichaetialis* Mont.: 'dentibus 16 carnosius rubris madore incurvo-conniventibus' (Montagne 1845: 119).
- Eucladium* Bruch & Schimp. 1846 — *eu* (well) + *klados* (branched), alluding to the repeatedly dichotomous branching: 'innovationibus repetitis multoties dichotome ramosae (unde nomen ευ et κλαδος)' (Schimper 1860: 134).
- Euptychium* Schimp. 1866 — *eu-* (well, finely) + *ptychos* (folded, cleft), alluding to the pluriplicate leaves.
- Eurhynchium* Bruch & Schimp. 1854 — *eu* (well, finely) + *rhynchion* (beak), alluding to the long, slender beak of the operculum: 'Operculum in rostrum plus minus elongatum productum (unde nomen)' (Schimper 1860: 548).
- Exostratum* L.T.Ellis 1985 — *exos* (outside) + Latin *stratum* (layer), from the continuous layer of chlorocysts over the supporting hyalocysts in the leaves (Ellis 1985: 9). Len Ellis coined the name for Cardot's section 'B' of *Exodictyon*.
- Fabronia* Raddi 1808 — After Florentine administrator Giovanni Valentino Mattia Fabroni, at one time director of the mint in Florence: 'In honores Fabroni monetae excudendae Praefecti Florentini nomen conditum.' (Müller 1851: 31). According to Crum & Anderson (1981) the name was chosen partly as a derivation from the Latin *faber*, meaning ingenious. Raddi later named the liverwort genus *Pellia* after Fabroni's son Leopoldo Pelli Fabroni, a lawyer (Raddi 1818: 50).
- Fallaciella* H.A.Crum 1991 — Latin *fallacia* (deceit or trick) + diminutive suffix *-ellus*. 'The generic name was chosen because of the fallacious or deceitful nature of this interesting moss, with its strong gametophytic resemblance to an unrelated genus, *Pterigynandrum*.' (Crum 1991: 320).
- Fifea* Crum 1991 — 'I give this species of New Zealand generic status, in the Lembophyllaceae, as *Fifea*, named for Allan J. Fife in recognition of his contribution to the bryology of New Zealand.' (Crum 1991: 319).



*Fissidens* Hedw. 1801 — Latin *fissus* (a split) + *dens* (tooth), alluding to the split peristome teeth: 'dentibus sedecim, latiuscuis, bifidis' (Hedwig 1801: 152).

*Floribundaria* M.Fleisch. 1905 — Latin *floribundus* (a profuse flowering) + *aris* (resembling), alluding to the abundance of sporophytes. Carl Müller had proposed the name in 1876 in anticipation of its later acceptance, so that Article 34.1 of the Code applies and Fleischer alone is the authority: 'In dieser Beziehung zeigen die Papillarien eine ähnliche gruppenweise Verarbeitung, wie unter Hypnum etwa die Sigmatella-Gruppe, und es ist deshalb zweckmässig, unsere obigen drei Arten als *Floribundaria* beisammen zu halten.' (Müller 1876: 267).

*Forsstroemia* Lindb. 1863 — After Johann Eric Forsström (1775–1824), Swedish clergyman, physician and naturalist on St Barthélemy in the Lesser Antilles, who collected the type specimen of *Forsstroemia trichomitria* (Hedw.) Lindb.: 'Lindberg...created the genus *Forsstroemia*...in honor of a minister who was a collector of mosses in the West Indies' (Patterson 1953: 254).

*Funaria* Hedw. 1801 — Presumably from Latin *funis* (cord) + *aris* (resembling), alluding to the twisted, cord-like seta of *F. hygrometrica*: 'Nomen Schreberianum a fune desumptum, quod pedunculus in *F. hygrometrica* humiditate funis instar contorquetur.' (Bridel 1827: 50). However, Johann Schreber, who coined the name in the 8th edition of *Genera Plantarum* (Schreber 1791: 760), gave no explanation of the etymology, nor did Hedwig (1801). It is noteworthy that Palisot de Beauvois (1804: 320) proposed to replace *Funaria* with *Strephidium* because, he said, the former was constructed from a personal name (i.e. Funari), a practice he disliked. Hedwig had earlier coined the name *Koelreutera* for the same plant (*Funaria hygrometrica* Hedw.) but that was a later homonym for *Koelreutera* J.A.Murray, a genus of Aizoaceae.

*Garckea* Müll.Hal. 1845 — After German botanist (Christian Friedrich) August Garcke (1819–1904), noted in particular for his monumental *Illustrierte Flora, Deutschland und angrenzende Gebiete* (1848), of which 23 editions were printed, the last in 1972.

Garcke would have been only in his mid-20s when Carl Müller named this pan-tropical genus.

*Garovaglia* Endl. 1836 — After Santo Garovaglio (1805–1885), professor of botany in Lombardy, who was instrumental in establishing the Laboratorio di Botanica Crittogamica in Pavia (Belli *et al.* 2004). Endlicher coined the name (as *Carovaglia*, an orthographic error) to replace *Esenbeckia* Brid., a later homonym of *Esenbeckia* Mart. (Rutaceae).

*Gemmabryum* J.R.Spence & H.P.Ramsay 2005 — *gemma* (a bud or propagule) + genus *Bryum*, from which it was separated: 'the name refers to the importance of the three different types of asexual gemmae in the genus' (Spence & Ramsay 2006).

*Gigaspermum* Lindb. 1865 — *gigas* (giant) + *sperma* (seed), alluding either to the size of the capsule, which is huge in comparison to the gametophyte, or to the size of the spores, which reach up to 130 µm in diameter.

*Glossadelphus* M.Fleisch. 1923 — *glossa* (tongue) + *adelphos* (brother), alluding to the tongue-shaped leaves — 'mehr oder minder länglich zungenförmigen, selten zugespitzten Blätter' (Fleischer 1923: 1352) — and presumably the similarity to *Taxithelium* from which *Glossadelphus* was separated.

*Glyphothecium* Hampe 1860 — *glyphos* (engraved) + *thekion* (little vessel, container), alluding to the strongly ridged capsules.

*Goniobryum* Lindb. 1865 — *gonio* (angular) + *bryon* (moss). Lindberg's intention is unclear, but the name is possibly merely a convenient derivation from *Rhizogonium* (from which it was separated) with the common *bryum* ending for moss genera.

*Goniomitrium* Hook.f. & Wilson 1846 — *gonio* (angular) + *mitra* (head-dress), a reference to the pleated calyptra: 'Calyptra campanulata, magna, speciosa, 8-costata, junior plicata.' (Wilson 1846b: 142).

*Grimmia* Hedw. 1801 — After Johann Friedrich Karl Grimm (1737–1821), physician and botanist in Gotha (Dixon 1954), mentioned by Kayser-Petersen in relation to the influenza epidemic of 1767 (Kayser-Petersen 1923). The name was first coined by Friedrich Ehrhardt (Bridel 1826–27: 161).

*Groutiella* Steere 1950 — After American teacher and bryologist Abel Joel Grout (1867–1947), author of several classic treatises on mosses, notably *Mosses with Hand-lens and Microscope* and the three-volume *Moss Flora of North America*. The name *Groutia* was already in use for a genus of flowering plants (Opiliaceae).

*Gymnostomiella* M.Fleisch. 1904 — Genus *Gymnostomum* + Latin diminutive suffix *-ellus*, reflecting its separation from *Gymnostomum* and the minute size of the plants: 'Pflanzen winzig klein' (Fleischer 1904: 309).

*Gymnostomum* Nees & Hornsch. 1823 — *gymnos* (naked) + *stoma* (mouth), alluding to the lack of a peristome: 'ob thecae orificium nudum' (Bridel 1826–27: 57). The name was coined by Hedwig (1787: 13) and is conserved against *Gymnostomum* Hedw. 1801.

*Hampeella* Müll.Hal. 1881 — After Ernst Georg Ludwig Hampe (1795–1880), German pharmacist and bryologist in Blankenburg, who contributed considerably to the knowledge of mosses as well as other plants. The name *Hampea* was already in use for a genus of flowering plants.

*Haplohymenium* Dozy & Molk. 1846 — *haploos* (single, simple) + *hymenium* (an old name for the peristome), alluding to the single peristome: 'Peristomium simplex e dentibus sedecim aequidistantibus...' (Dozy & Molkenboer 1846: 127). The name is conserved against *Haplohymenium* Schwägr. 1829.

*Hedwigia* P.Beauv. 1805 — After Johann Hedwig (1730–1799), physician and botanist in Leipzig, called by Dixon (1854) the 'Father of Bryology'. His most significant works were *Fundamentum Historiae Naturalis Muscorum Frondosorum* (1782), *Descriptio et Adumbratio Microscopico-Analytica Muscorum Frondosorum* (1787–1797) and *Species Muscorum Frondosorum* (1801). The latter is the starting point for all moss nomenclature except *Sphagnum*, and was prepared for publication after Hedwig's death by Schwägrichen. The name is conserved against *Hedwigia* Sw. 1788 (Burseaceae).

*Hedwigidium* Bruch & Schimp. 1846 — Genus *Hedwigia* + Greek diminutive suffix *-idion*, alluding to the similarity to that genus: 'ob similitudinem cum gen. *Hedwigia*' (Schimper 1860: 239).

*Helicodontium* (Mitt.) A.Jaeger 1878 — *helix* (coil, curl) + *odontos* (toothed), 'from the peristome, curling inwards when dry' (Dixon 1954: 406). Mitten coined the name for a section of *Hypnum*, but did not mention this character in the diagnosis of the section or the descriptions of species.

*Hennediella* Paris 1896 — After Roger Hennedy (1809–1877), Scottish phycologist and Professor of Botany at Anderson's University in Glasgow, teacher and friend of Robert Brown (Blockeel 1990). The name *Hennedia* had been applied for the genus by Brown in 1892 but this was an orthographic variant of the earlier algal genus *Hennedya* Harvey 1855, so Paris replaced it in an appropriate manner.

*Herpetineuron* (Müll.Hal.) Cardot 1905 — *herpeton* (creeping animal, reptile) + *neuron* (nerve), alluding to the characteristic snaking of the costa in the upper part of the leaf: 'nervo validiusculo luteo apice parum serpentino-flexuoso in acumine evanido exarata' (Müller 1890a: 496). Müller coined the name for a section of *Anomodon* that was raised to generic rank by Cardot.

*Himantocladium* (Mitt.) M.Fleisch. 1908 — *himantos* (leather thonging) + *klados* (branch), presumably alluding to the appearance of the complanate, overlapping leaves, resembling thonging on a whip handle or the like. Mitten (1868: 168) coined the name for a section of *Neckera* in which he included three species.

*Holomitrium* Brid. 1826 — *holos* (complete) + *mitra* (head-dress), alluding to the entire calyptra (Bridel 1826–27: 226). Bridel published the name as *Olomitrium*, ignoring the aspirated 'h'. The name and corrected orthography are conserved under the Code.

*Homalia* Brid. 1827 — *homalos* (flat), from the complanate habit of the plants, particularly of *Homalia complanata* (Bridel 1827: 812). Bridel's original name *Omalia*, lacking the aspirated *h*, was corrected to *Homalia* by Wilhelm Schimper. The name and corrected orthography are conserved under the Code.

*Homaliodendron* M.Fleisch. 1906 — *homalos* (flat) + *dendron* (tree), alluding to the flattened dendroid branches that arise from a creeping primary stem:



- 'Pflanzen breit, flach, wedelartig, zwei- bis dreifach gefiedert...' (Fleischer 1905–06: 74).
- Hookeriopsis* (Besch.) A.Jaeger 1907 — *Hookeria* + *opsis* (similar to). Beschereille coined the name for a subgenus of *Hookeria*, a genus named after William Jackson Hooker (1785–1865), renowned English botanist and collaborator with Thomas Taylor on *Musculogica Britannica*.
- Hylocomium* Bruch & Schimp. 1852 — *hylokomos* (forest-dwelling), alluding to the habitat of the plants: 'Habitatio terrestri, sylvatica, unde nomen, ὑλοκομιος sylvicola' (Bruch *et al.* 1851–55: 169). Schimper (1860: 656) treated *Hylocomium* as a subgenus of *Hypnum* but maintained the binomial combinations in *Hylocomium*. The name is conserved under the Code.
- Hymenodon* Hook.f. & Wilson 1844 — *hymen* (membrane) + *odon* (tooth), alluding to the membranous peristome: 'dentes sedecim, membranacei, fugaces, aequidistantes, linearisubulati imperforati in cupulam conniventes apicibusque cohaerentes, membrana basilari angusta persistente connexi...Nomen ab ὑμην et οδων' (J.D. Hooker & Wilson 1844: 548).
- Hymenostomum* R.Br. 1819 — *hymen* (membrane) + *stoma* (mouth), from the membrane covering the mouth of the capsule: 'the mouth of the capsule is...completely covered by a horizontal membrane...derived from the outer membrane of the capsule' (Brown 1819: 572). Brown established the genus as a segregate from *Leptostomum*, which William Hooker had included in *Gymnostomum*.
- Hyophila* Brid. 1827 — *hyo* (water, rain) + *philos* (loving). Bridel (1826–27: 761), alluding to the habitat, close to or in water. Bridel coined the name to replace *Rottleria* Brid. 1826, a later homonym of *Rottleria* Willd. 1797. A common name for the genus is 'water moss' or 'rain moss'. The name is not derived from *hydros* (water) or *hygros* (wet), as is sometimes claimed. The name is conserved under the Code.
- Hypnobartlettia* Ochyra 1985 — *hypnon* (moss) + *Bartlett*, 'in honour of my friend John K. Bartlett, who collected the moss for the first time and who has contributed much to our understanding of the moss flora of New Zealand' (Ochyra 1985: 3). John Bartlett contributed numerous papers on mosses, especially in *New Zealand Journal of Botany*, often collaborating with bryologists from overseas.
- Hypnodendron* (Müll.Hal.) Lindb. 1861 — *hypnon* (moss) + *dendron* (tree), alluding to the dendroid habit of the plants, which resemble miniature palms or tree-ferns.
- Hypnum* Hedw. 1801 — *hypnon*, an ancient name for an unidentified bryophyte, probably a moss. Note that the stem is not the often-quoted *hypnos*, which means 'sleep'. The name is conserved under the Code.
- Hypopterygium* Brid. 1827 — *hypo* (under) + *pterygion* (little wing), alluding to the position of the female inflorescences, nestling in the axils of the 'accessory leaves' or underleaves: 'ob situm floris foeminei sub tutela folii accessorii tegminalis nidulantis' (Bridel 1827: 709). It is often stated incorrectly that the name refers to the underleaves themselves.
- Ischyrodon* Müll.Hal. 1875 — *ischyros* (strong) + *odon* (tooth), alluding to the robust teeth of the single peristome: 'peristomium simplex externum: dentes 16 robusti lati elongati...' (Müller 1875: 443).
- Isocladiella* Dixon 1931 — *iso* (equal) + *clados* (branch) + Latin diminutive suffix *-ellus*, alluding to the more or less pinnate branching.
- Isopterygium* Mitt. 1869 — *iso* (equal) + *pterygion* (little wing). Like most of Mitten's names, the meaning is obscure. Crum and Anderson (1981: 1175) suggested that it could refer to 'the fact that the lateral leaves are, in most species, somewhat spreading and flattened together in two indistinct rows'.
- Kiaeria* I.Hagen 1915 — After Frantz Casper Kiaer (1835–1893), Norwegian physician and bryologist in Christiana (Oslo) (Crum & Anderson 1981, Koperski 1991), contemporary of Norwegian bryologist Ingebrigt Hagen (1852–1917).
- Lembophyllum* Lindb. 1872 — *lembos* (skiff) + *phyllon* (leaf), alluding to the boat-shaped leaves.
- Leptobryum* (Schimp.) Wilson 1855 — *leptos* (slender) + *bryon* (moss), a reference to the narrow, wispy appearance of the plants: 'Plantae...graciles' (Schimper 1860: 328) and 'Leaves very narrow, almost setaceous' (Wilson 1855: 242).



*Leptodictyum* (Schimp.) Warnst. 1906 — *leptos* (slender, weak) + *dictyon* (net), apparently alluding to the areolation of the leaves: 'Foliorum rete angustius, tenue, areolis rhomboideo-hexagonis, prosenchymaticis, solis basilaribus rectangulo-hexagonis parenchymaticis, omnibus parce chlorophyllosis' (Schimper 1860: 595). Schimper first coined the name for a subgenus of *Amblystegium*, which was raised to generic rank by Warnstorf.

*Leptodon* D.Mohr 1803 — *leptos* (slender, delicate) + *odon* (tooth), alluding to the narrow peristome teeth (Wilson 1855: 317). The name is conserved under the *Code*.

*Leptodontium* (Müll.Hal.) Hampe ex Lindb. 1864 — *leptos* (slender, delicate) + *odontos* (toothed), alluding to the peristome of 32 narrow teeth: (Müller 1849: 577). Hampe (1847: 70) first coined the name, but only with the intention in the future of separating two species from *Didymodon* and *Trichostomum* ('Bei späterer Gelegenheit ein Mehreres:') so Article 34.1 of the *Code* applies to the authority.

*Leptostomum* R.Br. 1811 — *leptos* (slender, delicate) + *stoma* (mouth), alluding to the rudimentary peristome, consisting of a papillose annular membrane: 'The character of *Leptostomum*, derived from the undivided annular process of the inner membrane of the capsule...' (Brown 1811: 322). Brown noted that Hedwig had drawn the peristome of *Bryum* [*Leptostomum*] *macrocarpum* Hedw. with teeth, although he could not find any himself. 'As he did not wish to be 'in opposition to such authority', Brown did not include *B. macrocarpum* in his new genus. The name is conserved under the *Code*.

*Leptotheca* Schwägr. 1824 — *leptos* (slender, delicate) + *thekion* (little vessel, container), alluding to the narrow capsule: 'Capsulae cylindricae, angustae' (Schwägrichen 1824: 135).

*Leptotrichella* (Müll.Hal.) Lindb. 1865 — Genus *Leptotrichum* + Latin diminutive suffix *-ellus*. The name *Leptotrichum* is derived from *leptos* (slender, delicate) + *trichos* (hair), referring to the fine peristome teeth: 'perist. dentibus linea media plerumque exaratis igitur saepe medio

secedentibus' (Müller 1848: 421). Müller established *Leptotrichella* for a section of *Seligeria* in which he included several species he had previously placed in *Leptotrichum* Hampe ex Müll.Hal. His comment 'An genus proprium?' was taken up by Sextus Lindberg in raising the section to generic rank.

*Lepyrodon* Hampe 1865 — *lepyros* (stripped off) + *odon* (tooth), alluding either to the lack of an outer peristome in the species then known, or to the dehiscent inner peristome teeth: 'Peristomium simplex, internum; membrana in cruribus 16 elongatis carinatis, medio pertusis, demum dehiscentibus...' (Hampe 1865: 367).

*Leucobryum* Hampe 1839 — *leukos* (white) + *bryon* (moss), clearly alluding to the typically almost white colour (usually very pale green to bluish-green), although Hampe did not say so in the protologue (Hampe 1839: 42).

*Leucoloma* Brid. 1827 — *leukos* (white) + *loma* (border), alluding to the pale border on the leaves: 'foliorum colorem marginalem album in sola nobis cognita specie designans' (Bridel 1827: 218). The name is conserved against *Macrodon* Arn. 1826 and *Sclerodontium* Schwägr. 1824.

*Leucomium* Mitt. 1868 — *leukoma* (white tablet), alluding to the 'soft, pale, almost white foliage of the species belonging to this genus' (Mitten 1868: 181).

*Leucophanes* Brid. 1826 — *leukos* (white) + *phainos* (appearance), referring to the typically pale colour of the plants (Bridel 1826–27: 763).

*Lindbergia* Kindb. 1897 — A name honouring Sextus Otto Lindberg (1835–1889), Swedish-born physician, naturalist and bryologist. He succeeded William Nylander to the chair in botany at the Botanical Museum in Helsingfors (Helsinki), where he lived for the rest of his life, and later was appointed director of the botanical gardens there.

*Lopidium* Hook.f. & Wilson 1854 — *lopis*, an unusual variant of *lepīs* (scale) + diminutive suffix *-idion*, alluding to the overlapping leaves, like the scales of a fish, etc. 'Name from *λοπις*, a scale' (Wilson 1854–55: 119).

*Macgregorella* E.B.Bartram 1939 — After Richard Crittenden McGregor (1871–1936), ornithologist and naturalist in the Philippines, who collected the

- type, *Macgregorella philipp[in]ensis* (= *M. indica*) from Luzon (Bartram 1939: 285). He was managing editor of the Philippines Journal of Science (in which Bartram published the new genus after McGregor's death) and at one time Acting Director of the Bureau of Science there. 'Many species of insects and other animals, as well as of plants, have been described or recorded from different parts of the Philippines...on the basis of material brought back by McGregor from his numerous field trips.' (Uichanco 1937).
- Macrocoma* (Müll.Hal.) Grout 1944 — *makros* (large) + *coma* (hair of the head), alluding to the long, dense hairs on the calyptra of *M. sullivantii* (Müll.Hal.) Grout.
- Macrohymenium* Müll.Hal. 1847 — *makros* (large) + *hymenium* (an old name for the peristome), alluding to the large peristome teeth.
- Macromitrium* Brid. 1819 — *makros* (large) + *mitra* (cap), alluding to the conspicuously long calyptra: 'ob calyptrae insignem longitudinem' (Bridel 1826–27: 306).
- Meesia* Hedw. 1801 — After David Meese (1723–1770), Dutch gardener, author of a flora of Friesland in 1760 (Dixon 1954, Koperski 1991). The name is conserved against *Meesia* Gaertn. 1788 (Ochnaceae).
- Meiotheciella* B.C.Tan, W.B.Schofield & H.P.Ramsay 1998 — Genus *Meiothecium* + diminutive suffix *-ellus*, alluding to the original placement of the species transferred to the new genus.
- Meiothecium* Mitt. 1868 — *meion* (smaller) + *thekion* (little vessel, container), alluding to the small capsule: 'theca parva, breviter pedunculata' (Mitten 1968: 185).
- Mesochaete* Lindb. 1870 — *mesos* (in the middle, between) + Latin *perichaetium* (fruit-stalk), alluding to the development of sporophytes in the axils of the leaves, rather than at the top of the stems (Lindberg 1870: 463). Sextus Lindberg, in the same work, also named the genus *Pleurochaete* for the same reason.
- Mesonodon* Hampe 1865 — *mesos* (in the middle, between) + *odon* (tooth), alluding to the presence of a preperistome: 'Peristomium simplex, intermedium (in pariete intermedia thecae oriundum)' (Hampe 1865: 347).
- Mesotus* Mitt. in Hook.f. 1867 — *mesotes* (middle or central position). Allen (1987a: 445) suggested that the name referred to the presumed intermediate systematic position of the genus: 'Mitten says it has the structure of leaf of *Symblepharis*, creeping stem of *Macromitrium* and teeth of *Grimmia*' (J.D. Hooker 1867, cited in Allen 1987a). He also noted that it might be taken from the type locality, Middle Island (i.e. modern-day South Island of New Zealand) or that it might be a reference to the lateral position of the capsule. However, none of Mitten's other generic names allude to a locality, and Mitten himself considered the perichaetia to be terminal (Allen 1987a: 441), so I think Allen's first suggestion is very likely correct.
- Meteoriopsis* M.Fleisch. ex Broth. 1906 — *Meteorium* + *opsis* (similar to), reflecting its segregation from other genera of Meteoriaceae.
- Meteorium* (Brid.) Dozy & Molk. 1848 — *meteoron* (high in the air), clearly alluding to its dangling epiphytic habit. The name was coined by Bridel (1827: 264) for a subgenus of *Pilotrichum*, but he did not indicate the etymology directly.
- Microbryum* Schimp. 1860 — *mikros* (small) + *bryon* (moss), alluding to the minute size of the plants: 'in genere nostro species unica caule utitur revera brevi, sed distinctissimo millimetrum fere metiente' (Schimper 1860: 10).
- Mielichhoferia* Nees & Hornsch. 1831 — After Mathias Mielichhofer (1772–1847), Austrian mineralogist and botanist and friend of Hornschuch. Mielichhofer studied the mosses of the Salzburg Alps between 1799 and 1820.
- Mittenia* Lindb. 1863 — After William Mitten (1819–1906), English pharmacist in Sussex and later bryologist at Kew. He published many new genera and species of mosses and liverworts, and his private herbarium of some 54,000 specimens was purchased for £400 by the New York Botanical Garden soon after his death (Fleming & Barneby 1964). Sextus Lindberg proposed the name *Mittenia* as a substitute for *Mniopsis* Mitt. (1859),



- a later homonym of *Mniopsis* Dumort. (1822) and *Mniopsis* Mart. (1823 or 1824).
- Mitthyridium* H. Rob. 1975 — *Mitten* + *Thyridium*, a clever combination made by Robinson because *Thyridium* Mitten (1968) was illegitimate as a later homonym of *Thyridium* Nitschke (1967), a genus of fungi (Robinson 1975: 432). The name *Thyridium* is from *thyris* (little door, window). Although not specifically stated by Mitten, the name clearly alludes to the group of thin-walled hyaline cells (cancellinae) in the leaf base: '*Thyridium* differs in its creeping stems and in the structure of its leaves being similar to that of *Calymperes* and *Syrrhopodon*' (Mitten 1868: 188).
- Muelleriella* Dusén 1905 — After Carl Müller (see *Muellerobryum*). The name is conserved over *Muelleriella* von Huerck 1896, a genus of diatoms.
- Muellerobryum* M. Fleisch. 1905 — After Carl Johann August Müller (1818–1899), renowned bryologist in Halle, who had published the illegitimate (later homonym) name *Armitia* for this genus: 'Sie ist dem Andenken des †Bryologen Carl Müller-Halle gewidmet' (Fleischer 1905–06: 62).
- Myurium* Schimp. 1860 — *myourus* (mouse's tail), alluding to the tail-like extension of the leaf apex: 'Folia valde concava subcochleariformis subito in apiculum filiformem producta.' (Schimper 1860: 695). Unusually for him, Schimper did not indicate the etymology, but *Myurella* Bruch & Schimp. was named on account of the resemblance of the branches to a mouse's tail ('Nomen ob ramorum formam, caudam Musculi imitatem') (Schimper 1860: 484).
- Nanobryum* Dixon 1922 — *nano* (dwarf) + *bryon* (moss), alluding simply to the very small size of the plants.
- Nanomitriopsis* Cardot 1909 — *Nanomitrium* + *opsis* (similar to), alluding to the similarity to that genus, whose names is derived from *nanos* (small) + *mitrion* (little cap), alluding to the small operculum: 'Capsula globosa...operculo indistincto' (Cardot 1909: 18). Cardot was probably aware that the name *Nanomitrium* had already been published by Sextus Lindberg in 1874 for a genus of Ephemeraceae.
- Neckera* Hedw. 1801 — A name honouring Noël Martin Joseph de Necker (1729–1793), Belgian botanist and bryologist in Mannheim (Dixon 1954), author of numerous important works including *Methodus Muscorum per Clases, Ordines, Genera ac Species* (1771). The genus was named by Hedwig in 1782 as *Neckeria*, an orthographic error that he corrected in 1801 (Britton 1905: 4). The name is conserved against *Nekeria* Scop. 1754 (Papaveraceae). Necker's birth date is often stated to be 1730, but he was born in Lille on 25 December 1729 (hence his first name).
- Neckeropsis* Reichardt 1870 — *Neckera* + *opsis* (similar to), reflecting the similarity to that genus, from which it was separated, with *Neckera undulata* Hedw. as the type: 'Ich habe desswegen für diese Gattung den Namen *Neckeropsis* wegen ihres *Neckeren* artigen Habitus gewählt und stelle sie zu den *Pilotricheen*.' (Reichardt, in Fenzl 1870: 181).
- Neolindbergia* M. Fleisch. 1908 — *neo* (new) + *Lindbergia*, honouring Sextus Otto Lindberg (1835–1889), Swedish bryologist and director of the botanical gardens in Helsingfors (Helsinki). 'Die Gattung ist dem Andenken des bekannten Bryologen S. O. Lindberg gewidmet.' (Fleischer 1908: 727). The name *Lindbergia* was not available as it had been published by Kindberg in 1897.
- Notoligotrichum* G.L.Sm. 1971 — *notos* (south) + genus *Oligotrichum*, alluding to the southern distribution of the species and their separation from *Oligotrichum*, a name derived from *oligos* (few, little) + *tricho* (hair), in reference to the sparse hairs on the calyptra.
- Ochiobryum* J.R.Spence & H.P.Ramsay 2005 — 'It is named in honour of the late Harumi Ochi (1920–2001), acknowledged expert on *Bryum*, who discussed the two species in one of his papers...' (Spence & Ramsay 2005: 70).
- Octoblepharum* Hedw. 1801 — *octos* (eight) + *blepharis* (eyelash), alluding to the eight-toothed peristome (Bridel 1826–27: 136). The name was first coined (as *Octoblepharis*) by Johann Schreber in the 8th edition of Linnaeus' *Genera Plantarum* in 1791 (Müller 1848: 86).



- Oedocladium* Mitt. 1868 — *oideos* (swollen) + *klados* (branch), from the swollen appearance of the leaves: 'Folia undique turgide imbricata' (Mitten 1869: 194).
- Oligotrichum* A.DC 1805 — *oligos* (few, little) + *triche* (hair), alluding to the sparse hairs on the calyptra: 'la coiffe n'est hérissée que d'un petit nombre de poils' (de Lamarck & de Candolle 1805: 492). The name is conserved under the Code.
- Orthodicranum* (Bruch & Schimp.) Loeske 1910 — *orthos* (upright) + genus *Dicranum*, alluding to the more or less erect capsules. Bruch and Schimper coined the name in the index to volume 1 of *Bryologia Europaea*, but used the name *Orthocarpa* for the section in the treatment (Bruch *et al.* 1836–51: 28), as did Schimper (1860: 80).
- Orthodontium* Schwägr. 1827 — *orthos* (upright) + *odontos* (toothed), alluding to the upright peristome teeth: 'Peristomium duplex erectum, dentibus sedecim; interioribus basi connatis, erectis.' (Schwägrichen 1827: 123). Schwägrichen (1824: 23) had earlier named another genus *Orthodon* for the same reason.
- Orthomnion* Wilson 1857 — *orthos* (upright) + *mnion* (moss), alluding to the erect habit, resembling that of *Mnium*, and perhaps also the upright peristome teeth of one of the species, *O. trichomitrium* Wilson. The authorship of the name is sometimes attributed to Mitten, but the title of the paper makes it clear that the names are attributable to William Wilson, and the name was validly published, although with the briefest imaginable diagnosis: 'Perist. *Brachymenii*, habitus *Mnii*, capsula ovali subsymmetrica.' (Mitten & Wilson 1857: 368).
- Orthorrhynchium* Reichardt 1868 — *orthos* (upright) + *rrhynchos* (beak), alluding to the beak of the operculum: 'operculum rectirostre' (Reichardt, in Fenzl 1870: 181).
- Orthotheciella* (Müll.Hal.) Ochyra 1998 — Genus *Orthothecium* + Latin diminutive suffix *-ellus*, alluding to the similarity of the habit of *Hypnum* (*Orthotheciella*) *filum* Müll.Hal.) to *Orthothecium strictum* Lorentz: 'Species maxime peculiaris perpulchra, ex habitu *Orthothecio* stricto Lrtz. valde similis' (Müller 1884: 83). Carl Müller coined the name in 1884 for a section of *Hypnum*, but without a diagnosis, an error he corrected five years later (Müller 1889: 36).
- Orthothecium* Schimp. 1852 — *orthos* (upright) + *thekion* (little vessel, container), alluding to the erect capsule: 'Nomen...ob capsulam in pedicello erectam' (Schimper 1860: 522). The name is conserved against *Orthothecium* Schott & Endl. 1832 (Sterculiaceae).
- Orthotrichum* Hedw. 1801 — *orthos* (upright) + *trichos* (hair), alluding to the more or less erect hairs on the capsules of most species.
- Palamocladium* Müll.Hal. 1896 — *palame* (palm of the hand) + *klados* (branch), alluding to the fasciculate branching: 'caulis fasciculatim in ramulos robustos curvulos pallescentes divisus' (Müller 1896: 466). Carl Müller coined the name to replace *Pleuropus* Griff., a later homonym of the fungal genus *Pleuropus* Pers.
- Papillaria* (Müll.Hal.) Lorentz 1864 — Latin *papilla* (nipple) + *aris* (resembling), alluding to the papillae (nipple-like projections) on the surface of the cells: 'cellulis punctulatis papillois composita' (Müller 1851: 134). The name is conserved against *Papillaria* J.Kickx f. 1835, a lichen genus. *Papillaria* Dulac 1867 (Juncaginaceae) is a later homonym but has been synonymised under *Scheuchzeria* L.
- Papillidiopsis* (Broth.) W.R.Buck & B.C.Tan 1989 — *Papillidium* + *opsis* (similar to), alluding to the similarity to that genus. The name *Papillidium* is from *papillidion* (little nipple), referring to the papillae on the cells. The name was first applied by Brotherus (1905–09: 1119) to a section of the genus *Trichosteleum*.
- Pelekium* Mitt. 1868 — *pelekys* (axe), presumably from a fancied resemblance of the sporophyte and its seta to a long-handled axe. The name is conserved against *Lorentzia* Hampe 1867.
- Pendulothecium* Enroth & S.He 1991 — *pendulos* (hanging) + *thekion* (little vessel, container), alluding to the 'cernuous to pendulous' capsules, one of the features that distinguishes the genus from *Homalia* and *Porotrichum*, from which its species were transferred (Enroth & He 1991: 9).

- Phascopsis* I.G.Stone 1980 — *Phasum* + *opsis* (similar to), alluding to the similarity to that genus.
- Phasum* L.ex Hedw. 1801 — *phascon*, an ancient name for *Usneam barbatam* of Theophrastus, but applied by Hedwig to all mosses lacking an operculum (Bridel 1826–27: 21, Müller 1848: 23).
- Philonotis* Brid. 1827 — *philo* (loving) + *notis* (moisture), alluding to the typically moist habitat: 'cum totus hocce genus locis udis scaturiginosis gaudeat' (Bridel 1827: 15).
- Physcomitrella* Bruch & Schimp. 1849 — Genus *Physcomitrium* + Latin diminutive suffix *-ellus*, alluding to the similarity to that genus: 'Genus *Physcomitrio* et praeprimis *Aphanoregmati* exotico affine' (Schimper 1860: 9).
- Physcomitrium* (Brid.) Brid. 1827 — *physce* (bladder) + *mitrion* (little cap), probably alluding to the shape of the operculum — 'operculo convexo mammillato' (Bridel 1826–27: 97) and not, as Dixon (1954: 297) suggested, to the calyptra, which Bridel did not describe. Bridel first used the name as a subgenus of *Gymnostomum* (Bridel 1826–27: 97) in volume 1 of his *Bryologia Universa*, but it was raised to the rank of genus in the index to volume 2 (Bridel 1827: 815).
- Pinnatella* M.Fleisch. 1906 — Latin *pinnata* (feathered) + diminutive suffix *-ellus*, alluding to the small, regularly pinnate secondary shoots arising from a creeping primary stem. The name was coined by Carl Müller (1875: 456) as a section of *Hypnum* but without a diagnosis.
- Plagiobryum* Lindb. 1862 — *plagios* (oblique) + *bryon* (moss), 'from the incurved capsule' (Dixon 1954: 341).
- Plagiomnium* T.J.Kop. 1968 — *plagios* (oblique) + *mnion* (moss), alluding to the presence of plagiotropic stolons in most species, a feature which distinguishes the genus from *Mnium* (Koponen 1968: 145).
- Plagiothecium* Bruch & Schimp. 1851 — *plagios* (oblique) + *thekion* (little vessel, container), alluding to the typically obliquely angled capsule: 'Capsula...plus minusque obliquata (unde nomen, πλάγιος obliquus)' (Schimper 1860: 575).
- Platyhypnidium* M.Fleisch. 1923 — Diminutive of *Platyhypnum*, the name given to the genus by Loeske in 1911 but already applied to another group of mosses by Hampe in 1877 (Fleischer 1923: 1537). Fleischer therefore felt that the new name *Platyhypnidium* was appropriate. The original name comes from *platys* (flat, wide) + *hypnon* (moss), alluding to the prostrate, spreading habit.
- Pleuridium* Brid. 1819 — *pleuridion* (on one side), indicating that the capsule is lateral, or apparently so: 'ob thecam lateralem aut talem visam, nomen istud confecimus' (Bridel 1827: 160). William Mitten felt that the name was 'neither founded on a true idea of their mode of fruiting nor applicable to the species' (Mitten 1851: 306). The name is conserved against *Pleuridium* Brid. 1818.
- Pleurophasum* Lindb. 1875 — *pleuron* (rib, side) + genus *Phasum*, alluding to the deeply plicate leaves of the type species, *P. grandiglobum* Lindb.
- Pogonatum* P.Beauv. 1804 — *pogonatos* (bearded), alluding to the densely hairy calyptra: 'Coeffe... l'extérieure composée de filamens entrelacés' (Palisot de Beauvois 1804: 329).
- Pohlia* Hedw. 1801 — After Johann Ehrenfried Pohl (1746–1800), professor of botany at Leipzig University where Hedwig was professor of medicine until 1789. In that year Pohl moved to Dresden and Hedwig was awarded his position, which included directorship of the botanical garden (Florschütz 1960). Hedwig first coined the name in 1789 (Hedwig 1801). The name has been mistakenly identified with a number of other Pohls (e.g. Koperski 1991), including Johann Emanuel Pohl (1782–1834), Austrian botanist in South America.
- Polytrichadelphus* (Müll.Hal.) Mitt. 1859 — genus *Polytrichum* + *adelphos* (brother), alluding to the similarity to that genus. Müller (1848: 201) coined the name for a section of *Catharinea* in which he included two species previously placed in *Polytrichum*, *C. ciliata* Müll.Hal. and *C. magellanica* Brid. Mitten (1859b: 97) raised the section to generic rank but included only the latter species, along with two others transferred from *Polytrichum*.



- Polytrichastrum* G.L.Sm. 1971 — *Polytrichum* + Latin *astrum* (star), probably reinforcing the star-like form of the plants when viewed from above.
- Polytrichum* Hedw. 1801 — *polys* (many) + *trichos* (hair), alluding to the hairy calyptra. The name had been in use since ancient times (*polytrichon*), but Johann Dillen first used it in its modern sense in 1718 (Scott 1988: 10).
- Porothamnium* M.Fleisch. 1908 — a combination of *Porotrichum* + *Thamnium*, alluding to two of the four genera from which Max Fleischer transferred species to create the new genus, the others being *Neckera* and *Leskea*. *Porotrichum* is derived from *poros* (perforation, passage, tube) + *triche* (hair), alluding to the perforated processes of the inner peristome (Dixon 1954: 409).
- Pottia* Ehrh. ex Fűrnr. 1829 — After Friedrich Johann Pott (1738–1805), professor of botany at Braunschweig. Friedrich Ehrhart (1742–1795) first published the name in 1787, before the starting date for moss nomenclature. The name is conserved against *Anacalypta* Röhl. ex Leman 1816 and *Physedium* Brid. 1826.
- Powellia* Mitt. 1868 — After Thomas Powell (1803–1887), missionary and botanist in the South Pacific, mainly in Samoa. He collected the type of the genus, *Powellia involutifolia* Mitt., from the base of a coconut palm on Tutuila (Mitten 1868: 188).
- Pseudephemerum* (Lindb.) I.Hagen 1910 — *pseudo* (false) + *Ephemerum*, indicating the similarity to that genus.
- Pseudohypnella* (Broth.) M.Fleisch. 1923 — *pseudo* (false) + genus *Hypnella* (diminutive of *Hypnum*), presumably from a resemblance to that genus. Brotherus first applied the name to a section of *Taxithelium*.
- Pseudoleskeopsis* Broth. 1907 — *Pseudoleskea* + *opsis* (similar to), alluding to the similarity to that genus. The name *Pseudoleskea* refers to the resembles the similarity to the genus *Leskea*, a name honouring Nathanael Gottfried Leske (1751–1786), professor in Leipzig and Marburg. Leske was a contemporary of Johann Hedwig, who coined the name *Leskea* in 1782 (Crum & Anderson 1981, Koperski 1991).
- Pseudoscleropodium* (Limpr.) M.Fleisch. ex Broth. 1925 — *pseudo* (false) + genus *Scleropodium*, alluding to Limpricht's original subgeneric separation of *S. purum* on the grounds of a smooth seta, pinnate branching and more or less plicate leaves. Limpricht (1895–1903: 142).
- Pseudospiridentopsis* (Broth.) M.Fleisch. 1908 — *pseudo* (false) + genus *Spiridentopsis*, alluding to the similarity to that genus. Brotherus created the name for a section of *Trachypodopsis*, and Max Fleischer raised it to generic rank with one species, *P. horrida* (Mitt.) M.Fleisch., on the basis that the peristome structure and habit was different from those of all other sections of *Trachypodopsis* (Fleischer 1908: 730).
- Pseudosymblepharis* Broth. 1924 — *pseudo* (false) + genus *Symblepharis*, alluding to the similarity in appearance to that genus. The latter name is derived from *sym-* (joined) + *blepharis* (eyelash), referring to the peristome teeth: 'the sixteen teeth of the peristome are more or less completely united below in pairs, and so form eight groups' (Salmon 1898: 486).
- Pseudotaxiphyllum* Iwats. 1987 — *pseudo* (false) + *Taxiphyllum*, alluding to the similarity in growth form to species in that genus. Zennoske Iwatsuki first coined the name for a subgenus of *Isopterygium*, but without a diagnosis (Iwatsuki 1970: 334). He made the separation of *Pseudotaxiphyllum* on the basis of the lack of paraphyllia, the presence of gemmae, the dioicous condition and the presence of an annulus on the capsule (Iwatsuki 1987: 448).
- Psilopilum* Brid. 1827 — *psilos* (bare, bald) + *pilos* (felt hat), alluding to the lack of hairs on the calyptra: 'e calyptrae glabritie desumptum' (Bridel 1827: 95).
- Pterobryella* (Müll.Hal.) A.Jaeger 1877 — *pteron* (wing, feather) + *bryon* (moss) + Latin diminutive suffix *-ellus*, alluding to the feathery habit: 'frons dendroideus pterodea = vel climacioideo = plumosus' (Müller 1873: 182). The name was originally coined for a section of *Hypnum* by Carl Müller (the names *Pterobryum* and *Pterobryon* were already in use) and later raised to generic rank by August Jaeger.

- Pterobryidium* Broth. & Watts 1918 — Genus *Pterobryopsis* + Greek diminutive suffix *-idion*, alluding to the similarity to that genus: 'Genus novum insigne, habitu foliorumque structura speciebus nonnullis *Pterobryopsisidis* simillimum...' (Brotherus & Watts 1918: 559).
- Pterobryon* Hornsch. in Mart. 1840 — *pteron* (wing, feather) + *bryon* (moss), alluding to the neat pinnate branching: 'Nomen ob ramulos eleganter pinnatos, e vocius πεπερον, ala, et βρυον, muscus, compositum.' (Hornschuch, in Martius 1840: 51).
- Pterygoneurum* Jur. 1897 — *pterygion* (little wing) + *neuron* (nerve), alluding to the wing-like lamellae on the dorsal side of the costa. The name is conserved against *Pharomitrium* Schimp. 1860.
- Ptychomitrium* Fühnr. 1829 — *ptyche* (pleat) + *mitrion* (little cap), alluding to the plicate calyptra: 'Nomen *Ptychomitrium* a nobis in *Bryol. eur.* propositum characterem (πτυχη, plica, μίτριον, calyptra) omnibus speciebus necessarie communem exprimit.' (Schimper 1860: 243). The name is conserved against *Brachysteleum* Rchb. 1829.
- Ptychomnion* (Hook.f. & Wilson) Mitt. 1869 — *ptychos* (pleated) + *mnion* (moss), alluding to the pleating of the leaves (especially when dry) and probably also the plicate theca: 'Folia plicata, e cellulis angustis pellucidis areolata. Thecae plicatae.' (Mitten 1869: 536).
- Pulchrinodus* B.H.Allen 1987 — Latin *pulchre* (beautifully) + *nodus* (knot, difficulty). 'The name is given in reference to the striking beauty of this moss and the puzzling systematic problem it presents.' (Allen 1987b: 340). Bruce Allen was referring in the second instance to the doubtful placement of the genus in the Pterobryaceae.
- Pyrrhobryum* Mitt. 1868 — *pyrrhos* (fire-coloured) + *bryon* (moss), presumably alluding to the colour of the peristome, although Mitten (1868: 174) did not indicate the etymology.
- Racomitrium* Brid. 1819 — *rhakos* (frayed) + *mitrion* (little cap), alluding to the calyptra, which in some species is split all around the base: 'Nomen a graecâ voce ρακος lacer et μίτριον ob calyptram basi lacero-fimbriatam.' (Bridel 1826–27: 208). Bridel preferred to omit the aspirated *h*.
- Racopilum* P.Beauv. 1805 — *rhakos* (frayed) + *pilos* (felt hat), alluding to 'a ragged and hairy cap... more appropriate to those species with mitrate, lobed calyptra' (Crum & Anderson 1981: 877). As in *Racomitrium*, the aspirated *h* was omitted from the original name.
- Radulina* W.R.Buck & B.C.Tan 1989 — *Radula* (a scraper); 'the generic name is derived from Latin for a small scraper, and by extension to a snail's tongue, in reference to the leaf papillae' (Ramsay *et al.* 2004). It is interesting to compare this etymology with that of the liverwort genus *Radula*, which alludes to the flattened, truncate perianth.
- Rhabdodontium* Broth. 1906 — *rhabdosis* (fluting of a column) + *odontos* (toothed), alluding to the striate, lamellate peristome teeth: 'mit zickzackförmiger Längslinie, bis über die Mitte quer- und schrägstreifig, and der Spitze hyalin, spärlich papillös, ohne vortretende Lamellen.' (Brotherus 1905–09: 804).
- Rhacocarpus* Lindb. 1863 — *rhakos* (frayed) + *karpos* (seed), presumably alluding to the raggedly split base of the calyptra. Magill (1993: 10) provided a neat summary of the intrigue surrounding the conservation of this name.
- Rhaphidorrhynchium* Besch. ex M.Fleisch. 1923 — *rhaphidos* (needle-like) + *rhynchos* (bill, beak), alluding to the long, narrow rostrum on the operculum. Bescherelle coined the name in his *Note sur les Mousses des îles Saint-Paul et d'Amsterdam* (1875: 3, 5) (Fleischer 1923: 1245), but apparently that has not been accepted as valid publication of the name.
- Rhizogonium* Brid. 1827 — *rhiza* (root) + *gonima* (fruit), alluding to the fact that the sporophytes appear to arise from the 'root' of the plant — 'originem ab ipsa radice in hoc genere solemnem indicans' (Bridel 1827: 663) — although they are actually borne on specialized branches at the base of the stem. Crum and Anderson (1981: 657) were not quite correct in suggesting that the name referred to the 'copious paraphyses, suggesting a rooted sporophyte'. The stem *gonima* was misspelt *ginomai* in the protologue.



- Rhodobryum* (Schimp.) Limpr. 1892 — *rhodon* (rose) + *bryon* (moss), from the terminal rosette of leaves in most of the species: 'Folia...comalia in rosulam patula (unde nomen) congesta' (Schimper 1860:381). Schimper created the subgenus *Rhodobryum* within *Bryum* to accommodate *B. roseum* (Hedw.) Crome, and Limpricht raised it to generic rank. The name is conserved against *Rhodo-bryum* Hampe 1874.
- Rhynchostegium* Bruch & Schimp. 1852 — *rhynchos* (bill) + *stegion* (roof, covering), alluding to the long-beaked operculum: 'operculum subulirostrum' (Schimper 1860: 564).
- Rhytidadelphus* (Limpr.) Warnst. 1906 — *Rhytidium* + *adelphus* (brother), alluding to the supposedly close relationship between the two genera (originally both subgenera of *Hylocomium*). Limpricht (1895–1903: 590) published the name, citing Lindberg (1879) as the authority, but Lindberg apparently published the name without description.
- Rosulabryum* J.R.Spence 1996 — 'Latin *rosula* (a rosette) and Greek *bryon* (a moss), in reference to the leaves being clustered in rosettes' (Spence & Ramsay 2006). Spence erected the genus to include the rosulate species of *Bryum* with unreduced peristomes (Spence 1996: 222).
- Saelania* Lindb. 1878 — A name honouring Anders Thiodolf Saelan (1834–1921), Finnish psychiatrist and botanist in Helsingfors (Helsinki). For a short time he was an assistant at the museum in Helsinki and worked with William Nylander on the botanical collections of the museum. For most of his life he devoted himself to psychiatric medicine, but compiled (with Elia Lönnrot) the first flora of Finland written in Finnish as well a complete bibliography of Finnish botanical literature (Westrin *et al.* 1926: 157–158).
- Sanionia* Loeske 1907 — After Carl Gustav Sanio (1832–1891), Prussian botanist and teacher in Lyck. Sanio, along with Limpricht and Warnstorf, worked on mosses included at some stage in *Drepanocladus*, and Loeske honoured all three in the names of genera constituted in part from species of *Drepanocladus* (Loeske 1907: 309). Sanio is best known for his work on wood anatomy, particularly the nature of compression wood.
- Sauloma* (Hook.f. & Wilson) Mitt 1860 — *saulos* (soft). Although Wilson (1854: 122) gave this etymology for his new section of *Hookeria* he did not explain it, but it presumably alludes to the soft, delicate appearance of *Sauloma tenella* (Hook.f. & Wilson) Mitt.
- Schistidium* Brid. 1819 — *schistos* (divided) + Greek diminutive suffix *-idion*, alluding to the splitting of the calyptra at its base (Bridel 1826–27: 113). The name is conserved against *Schistidium* Brid. 1818.
- Schizymenium* Harv. ex Hook. 1840 — *schizos* (split) + *hymenium* (an old name for the peristome), alluding to the inner peristome which is divided into branched cilia above a low basal membrane: 'Peristomium simplex; membrana horizontalis ex integumento interno orta, in ciliosis subtilibus subramosis fissa' (W.J. Hooker 1840: t. 202). Hooker was incorrect in believing that the peristome was single, as an outer peristome is often present in the type species, *S. bryoides* Harv. ex Hook.
- Schlotheimia* Brid. 1812 — A name honouring Ernst Friedrich von Schlotheim (1764–1832), an acquaintance of Bridel: 'Nomen huic generi in honorem viri generosissimi, clarissimi, amicissimi a Schlotheim, naturae sagacissimi investigatoris, impositum' (Bridel 1826–27: 329).
- Schoenobryum* Dozy & Molk. 1848 — *schoinos* (cord, reed) + *bryon* (moss), alluding to the cord-like appearance of the stems, especially when dry: 'Nomen huicce generi impositum est, a Graecis verbis *σχοινος* et *bryon βρυον*, propter caules praesertim siccitate funiformes' (Dozy & Molkenboer 1848: 184).
- Schwetschkea* Müll.Hal. 1875 — After (Carl) Gustav Schwetschke (1804–1881), bookseller (and probably publisher) in Halle where Müller lived, in celebration of Schwetschke's 50th anniversary — 'in welcher der Buchhandler Dr. Gustav Schwetschke in Halle a. 5. sein fünfzigjähriges Jubiläum feierte' (Müller 1875: 429). Schwetschke is known largely as the author of the *Codex Nundinarius Germaniae Literatae Bisecularis* of 1850–1877, a bibliography of all the Frankfurt and Leipzig book fairs from 1564 to 1846.

- Sclerodontium* Schwägr. 1824 — *skleros* (hard, rough) + *odontos* (toothed), alluding to the roughened surface of the peristome teeth: 'Peristomium simplex coriaceum' (Schwägr. 1824: 124).
- Scleropodium* Bruch & Schimp. 1853 — *skleros* (hard, rough) + *pous* (foot), alluding to the papillose seta: 'pedicello aspero (unde nomen, σκληρός asper)' (Schimper 1860: 546).
- Scorpidium* (Schimp.) Limpr. 1899 — *scorpio* (scorpion) + diminutive suffix *-idion*, alluding to 'a resemblance to a scorpion with its tail curved upwards' (Crum & Anderson 1981: 994) in relation to the generitype, *S. scorpioides* (Hedw.) Limpr. This resemblance was first suggested by Johann Dillen, who coined the name *Hypnum scorpioides* (= *S. scorpioides*) (Dillen (1741: 290).
- Scorpiurium* Schimp. 1876 — *scorpiouros* (scorpion's tail), alluding to the combination of falcate-secund leaves and drooping capsule, giving a fancied resemblance to a scorpion with its tail raised.
- Seligeria* Bruch & Schimp. 1846 — After Ignaz Seliger (1752–1812), pastor and botanist in Wölfelsdorf, Silesia (now Wilkanów, Poland). 'zu Ehren des schlesischen Botanikers Pfarrer Seliger benannt' (Müller 1901: 305). Bruch and Schimper (1846: 7) based the name on *Weissia seligeri*, a synonym of *Weissia pusilla*, the generitype of the new genus.
- Sematophyllum* Mitt. 1864 — *semato* marked + *phyllon* leaf, alluding without doubt to the distinctive alar cells that distinguish the genus: 'Folia cellulis alaribus ut plurimum utrinque tribus distinctis signata.' (Mitten 1864: 5).
- Sorapilla* Spruce & Mitt. 1869 — From the word for 'moss' as spoken by the people ('Indos Maynenses') of the foothills of the eastern Andes (Spruce in Mitt. 1869: 603).
- Sphagnum* Linnaeus 1753 — *sphagnos*, an ancient name applied by Pliny to a lichen or moss, and by Johann Dillen to this genus, then ratified by Linnaeus and Hedwig (Bridel 1926–27: 1).
- Spiridens* Nees 1823 — *speiros* (spiralled, twisted) + Latin *dens* (tooth), alluding to 'the spirally involute nature of the teeth of the peristome, as seen when dry' (Hooker 1830: 2).
- Splachnobryum* Müll.Hal. 1869 — 'So named because of a presumed relationship to the Splachnaceae and some resemblance in habit to some blunt-leaved species of *Bryum*.' (Crum & Anderson 1981). The genus name *Splachnum* comes from *splachnos* (viscera), alluding to the rugose appearance of the apophysis when dry, and was in use before Johann Dillen published it (Scott 1987: 625). Crum and Anderson (1981) mistakenly gave the meaning as 'lunglike'.
- Stereophyllum* Mitt. 1859 — *stereos* (stiff, solid) + *phyllon* (leaf), presumably alluding to the stiffness of the leaves. Mitten created the genus to include a single species, *S. indicum* (Bél.) Mitt. Unfortunately he did not give a description of that species, and his generic diagnosis is remarkably brief: 'Pleurocarpium. Folia uninervis, cellulis rotundatis firmis. Caulis prostratus, vage ramosus, radicans.' (Mitten 1859a: 117).
- Stonea* R.H.Zander 1989 — After Ilma Grace Stone (1913–2001), Australian bryologist in Melbourne. She is best known for co-authoring *The Mosses of Southern Australia* (Scott & Stone 1976) and her detailed studies on *Fissidens* and *Pottiaceae*. She named three extant Australian genera: *Calymperastrum*, *Phascopsis* and *Viridivellus* and has two Australian moss species named in her honour: *Macromitrium stoneae* Vitt & Ramsay, and *Syrropodon stoneae* Reese,
- Stoneobryum* Norris & H.Robinson 1981 — 'We name the new genus *Stoneobryum* in honour of Dr. Ilma Stone of the University of Melbourne, Australia' (Norris & Robinson 1981: 96). See *Stonea*.
- Straminergon* Hedenäs 1993 a combination of the specific epithet of the type species *Hypnum stramineum*, from Latin *stramineus* (straw-like), and the similarity to *Calliergon* — 'speciebus *Calliergonis* (Sull.) Kindb. simile' (Hedenäs 1993: 462).
- Syntrichia* Brid. 1801 — *syn* (together, joined) + *trichos* (hair), alluding to the attachment of the bases of the hair-like peristome teeth to the inner membrane: 'ob cilia [seu] dentes capilliformes basi in membranae contextos' (Bridel 1826–27: 578).
- Syrrophodon* Schwägr. 1824 — *syrrhopos* (close together) + *odon* (tooth), alluding to the connivent



teeth of the peristome: 'Nomen a dentibus peristomii conniventibus fere horizontalibus, σνυροποιζ' (Schwägrichen 1824: 110).

*Taxiphyllum* M.Fleisch. 1923 — apparently from Latin *taxus* (yew) + *phyllon* (leaf), derived downwards from section *Taxicaulis* of *Hypnum* erected by Müller (1851: 277). Müller coined *Taxicaulis* seemingly in apposition to section *Cupressina*, a name clearly derived from *Cupressus* on account of the appearance of the stems, noting 'Caulis tenellus plumulose foliosus...a Cupressinae congeneribus foliis oblique acuminatis (ut rami) vix falcatis' (Müller loc. cit.). Mitten's name *Stereodon* (*Taxiphyllum*) *taxirameum* further reflects this presumed etymology. Because the leaves in *Taxiphyllum* are more or less two-ranked, it has been claimed that the first stem is Greek *taxis* (arrangement, rank). However, the more instructive (and available) *Ditaxiphyllum* would have been a logical choice of name had that been the intention.

*Taxithelium* Spruce ex Mitt. 1869 — *taxis* (arrangement, rank) + *thele* (nipple), 'so named because of several papillae arranged in a row over the cell lumen (in some species)' (Crum & Anderson 1981: 1123).

*Tayloria* Hook. 1816 — After Irish botanist Thomas Taylor (1775–1848), who collaborated with William Hooker on *Muscologica Britannia*.

*Tetracoscinodon* R.Br. bis. 1895 — *tetra* (four) + *Coscinodon*, presumably alluding to the four-toothed peristome and the similarity in appearance to that genus.

*Tetraphidopsis* Broth. & Dixon 1912 — genus *Tetraphis* + *opsis* (similar to), alluding to the similarity to that genus: 'the capitulum is enclosed in bracts resembling those of *Tetraphis* but smaller' (Dixon 1912: 453). The name *Tetraphis* was coined by Johann Hedwig, from *tetraphos* (divided into four parts) — not *tetra* (four) as is often stated — referring to the four peristome teeth: 'Peristomium simplex, dentibus quatuor pyramidalibus.' (Hedwig 1801: 45).

*Tetrapterum* Hampe ex A.Jaeger 1869 — *tetra* (four) + *pteron* (wing, feather). 'The generic name, applied because the spore capsule was regarded as quadrangular rather than rounded in section, goes

back to Hampe (*in litt.*) according to Carl Müller' (Andrews 1945: 190).

*Thamnium* Schimp. 1852 — *thamnion* (bush, shrub), alluding to the rather untidy, bushy appearance of the plants: 'nomine faciem suam (θαμνιον arbuscula) declarante designatum' (Schimper 1860: 574). The name is illegitimate (see *Thamnobryum*) and stands in the Australian flora only because *T. novaevalesia* Kindb. has not been transferred. The genus once comprised almost 100 disparate species.

*Thamnobryum* Nieuwl. 1917 — *Thamnium* + *bryon* (moss), a replacement for *Thamnium*, an illegitimate name because of an earlier homonym: 'Because there was an older *Thamnium* Klotzsch the moss of that name must receive another. *Thamnobryum* may be suggested.' (Nieuwland 1917: 50).

*Thuidiopsis* (Broth.) M.Fleisch. 1923 — *Thuidium* + *opsis* (similar to), a simple name variation coined by Brotherus (1905–09: 1014) for a subgenus of *Thuidium* and raised to generic rank by Fleischer.

*Thuidium* Bruch & Schimp. 1852 — Genus *Thuja* (Cupressaceae) + Greek diminutive suffix *-idion*, alluding to the resemblance of the feathery, branched fronds to the foliage of those trees: 'Le genre *Thuidium*, ainsi nommé à cause du port des plantes qu'il renferme et qui imitent en petit celui des *Thuja*' (Bruch *et al.* 1851–55: 157). Dixon (1954: 424) was correct in stating that the name was not, as Sextus Lindberg thought, derived from *thya* (door, gate). The name *Thuja* is probably a corruption from the *thya* of Theophrastus, from the Greek verb *thyo* (I perfume), alluding to the use of cedar wood as incense (Phillips 1823: 51).

*Timmia* Hedw. 1801 — A name honouring Joachim Christian Timm (1734–1805), German botanist and mayor of Malchin, author of *Florae Megapolitanae Prodromus* (1788). 'Nominis ratio. Cl. Timm., Consul apud Malchinenses meritisissimus simulque vegetabilium cuiusque generis in illis terris prouenientium indefessus indagator, primus singularem hanc speciem ibidem detexit, mihi que cespitibus recentibus transmissis, eandem vertim disquirendi fecit copiam.' (Hedwig 1787: 85). The type of the genus is, appropriately, *Timmia*

- megapolitana* Hedw. The name is conserved against *Timmia* J.F.Gmel. 1791 (Amaryllidaceae).
- Tortella* (Lindb.) Limpr. 1888 — Latin *tortus* (twisted) + diminutive suffix *-ellus*, alluding to the characteristic twisting of the long peristome teeth: 'Peristomäste (32) spiralig links gewunden' (Limpricht 1888: 520). Lindberg (1879: 21) coined the name for a subgenus of *Mollia* Schrank ex Lindb.
- Tortula* Hedw. 1801 — Diminutive of Latin *tortus* (twisted), from the spiral twisting of the peristome teeth: 'Peristomium simplex: dentibus capillaribus, spiraliter convolutis...' (Hedwig 1801: 122). The name is conserved against *Tortula* Roxb. ex Willd. 1800 (Verbenaceae).
- Touwia* Ochyra 1986 — 'It is with great pleasure that I name this distinctive genus and species *Touwia laticostata* in honour of Dr Andries Touw of Leiden, Holland, in recognition of his great contribution to the taxonomy of exotic mosses, especially of the Neckeraceae.' (Ochyra 1986: 103).
- Trachycarpidium* Broth. 1901 — *trachys* (rough) + *karpos* (fruit) + diminutive suffix *-idion*, alluding to the surface of the capsule of the type species, *T. verrucosum* (Besch.) Broth.: 'Kapsel...mit großen Pusteln dicht besetzt' (Brotherus 1901-05: 384).
- Trachyloma* Brid. 1827 — *trachys* (rough) + *loma* (border), referring to the papillose outer surface of the ciliate peristome teeth: '...ciliorum marginem denticulis asperum denotans' (Bridel 1827: 277).
- Trachyphyllum* A.Gepp. 1901 — *trachys* (rough) + *phyllon* (leaf), alluding to the papillose surface of the leaves, with papillae at each end of the cells: 'This peculiar type of papillosity, usually coupled with numerous quadrate alar cells, make the genus readily identifiable' (Buck 1979: 379).
- Trachypus* Reinw. & Hornsch. 1829 — *trachys* (rough) + *pous* (foot), alluding to the markedly papillose seta.
- Trachythecium* M.Fleisch. 1923 — *trachys* (rough) + *thekion* (little vessel, container), alluding to the surface of the capsule, on the basis of which Fleischer separated the genus from *Ectropothecium*: 'mit grossen, mamillosen Warzen bedeckten Sporogone' (Fleischer 1923: 1415).
- Trematodon* Michx. 1803 — *tremato* (perforated) + *odon* (tooth), alluding to the perforated peristome teeth: 'Peristomii simplicis dentes 16, distincti, subulati, recti, foraminulis pertusi.' (Michaux 1803: 289). Wilson (1854-55: 69) incorrectly attributed the name to Louis Richard, who helped Michaux's son Francois prepare the volume for publication after Michaux's death.
- Trichosteleum* Mitt. 1868 — *trichos* (hairy, hair-like) + *stele* (pillar, column), alluding apparently to the long, slender seta: 'Theca in pedunculo elongato gracillimo...' (Mitten 1868: 181).
- Trichostomum* Bruch 1829 — *trichos* (hairy, hair-like) + *stoma* (mouth), alluding to the filiform peristome. Although attributed to Bruch under the rules of nomenclature, the name was coined by Hedwig: 'Nomen Hedwiganum...ob peristomii dentes angustos capilliformes' Bridel (1826: 488). The name is conserved against *Trichostomum* Hedw. 1810 and *Plaubelia* Brid. 1826.
- Tridontium* Hook.f. ex Hook. 1840 — *tris* (three) + *odontos* (toothed), alluding to the peristome teeth, which tend to split into three ciliate segments, as illustrated and described by Hooker: 'dentibus... singula e ciliis tribus articulatis magis minusve connexis formata' (W.J. Hooker 1840: t. 248).
- Triquetrella* Müll.Hal. 1897 — Latin *triquetris* (triangular) + diminutive suffix *-ellus*, alluding simply to the triquetrous arrangement of the leaves. Carl Müller probably used this form because *Triquetra* was already in use for a genus of Fabaceae.
- Trismegistia* (Müll.Hal.) Müll.Hal. 1896 — Presumably from Hermes Trismegistus ('thrice greatest'), an incarnation of the Egyptian god Thoth and divine bringer of knowledge; no other etymology seems possible. The name was first given by Müller (1874: 89) to a section of *Hypnum* in 1874, without any indication of the etymology.
- Ulebryum* Broth. 1906 — After Ernst Heinrich Georg Ule (1854-1915), German botanical explorer in Amazonian and Andean South America, + *bryon* (moss). 'Genus novum peregrinatorini meritissimo E. Ule dedicatum' (Brotherus 1906: 271).
- Ulota* D.Mohr 1806 — *ulote* (something curled), alluding to the strongly curled leaves (when dry) of



most species. Bridel (1826–27: 300) noted that one of the English names for the genus was ‘curl-moss’.

*Verrucidens* Cardot 1908 — Latin *verruca* (wart) + *dens* (tooth), alluding to the warty surface of the peristome teeth. *Verrucidens* was placed under *Dicranoweisia* by Ochyra (1999: 500) but this has not been generally accepted.

*Vesicularia* (Müll.Hal.) Müll.Hal. 1896 — Latin *vesicula* (little bladder) + *aris* (resembling), alluding to ‘the lax areolation of the leaf, consisting of short, broad cells suggestive of inflated vesicles (or bladders)’ (Crum & Anderson 1981: 1196). This view is supported by Müller’s description of the cells of *Hypnum* [*Vesicularia*] *montagnei* Müll. Hal. — ‘cellulis magis chlorophyllosis, utriculo primordiali maxime evoluto saepe densissime repletis tenerimus’ (Müller 1851: 234).

*Viridivellus* I.G.Stone 1976 — Latin *viridis* (green) + *vellus* (wool, fleece), alluding to the appearance of the only species, *Viridivellus pulchellum* — ‘Gametophyte...in patches like tiny green fleece’ (Stone 1976). The name was suggested to Ilma Stone by George Scott.

*Warburgiella* Müll.Hal. ex Broth. 1900 — After botanist Otto Warburg (1859–1938), who studied in particular the flora of the monsoon regions, especially in the Philippines but also the Indian subcontinent, mainland Asia and Australia. His cryptogamic collections were enumerated in the first volume of *Monsunia* (Underwood 1903: 666), in which Carl Müller first published the name *Warburgiella* as a subgenus of *Hypnum*. The African genus *Warburgia* had already been named in Warburg’s honour.

*Warnstorfia* Loeske 1907 — After Carl Friedrich Warnstorf (1837–1921), German teacher and botanist, a contemporary of Leopold Loeske (1865–1935). *Warnstorfia* was constituted from species drawn in part from *Drepanocladus* (see also *Sanionia*).

*Weissia* Hedw. 1801 — After Friederich Wilhelm Weiss (1744–1826), botanist in Göttingen (Hedwig 1801: 64). His first name was Friederich on his birth certificate but Friedrich on his death certificate, and his surname was Weiß (= Weisz or Weiss) in German

but Weis in the Latinised form used in his doctoral dissertation, and presumably subsequently in his professional career (Grummann 1962). Thus *Weissia* is based on his German name but *Dicranoweisia* is based on his Latinised name.

*Weymouthia* Broth. 1906 — After William Anderson Weymouth (1842–1928) English-born botanical collector in Tasmania. On arriving in Launceston he worked on newspapers, and later became an insurance agent. What little is known of his life has been summarised by Dalton (1997).

*Wijkia* H.A.Crum 1971 — ‘I have chosen the name *Wijkia* as a tribute to the invaluable contribution to bryology made by Dr. R. van der Wijk of Gröningen, chief editor of the *Index Muscorum*’ (Crum 1971: 170).

*Willia* Müll.Hal. 1890 — A name honouring Hermann Will (1852–1930), German botanist on the South Polar Expedition of 1882–1883 (Godley 1970: 81). Will spent a year on South Georgia during this expedition, and collected the type there (Müller 1890: 311).

*Wilsoniella* Müll.Hal. 1881 — After William Wilson (1799–1871), English bryologist, author of *Bryologia Britannica* (Wilson 1855) and a major contributor to *Botany of the Antarctic Voyage* (J.D. Hooker 1844–60). The name *Wilsonia* was unavailable to Carl Müller as it had been published for three different vascular genera: *Wilsonia* Raf. 1814, *Wilsonia* R.Br. 1818 and *Wilsonia* Hook. 1829.

*Zygodon* Hook. & Taylor 1818 — *zygos* (yoke) + *odon* (tooth), alluding to the peristome teeth, which have ‘the exterior of 16 teeth approaching in pairs’ (W.J. Hooker & Taylor 1818: 70), i.e. as if yoked together.

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## References

- Allen, B.H. (1987a). A revision of the genus *Mesatus*. *Journal of Bryology* **14**, 441–452.
- Allen, B.H. (1987b). A systematic account of *Pulchrinodous inflatus* (Musci: Pterabryaceae), genus novum. *New Zealand Journal of Botany* **25**, 335–342.
- Andrews, A.L. (1945). Taxonomic notes V. The genus *Tetropterum*. *The Bryologist* **48**, 190–193.
- Bagster, S. (1870). *The analytical Greek lexicon*. Samuel Bagster and Sons: London.
- Bartram, E.B. (1939). Mosses of the Philippines. *Philippine Journal of Science* **68**, 1–425.
- Bartram, E.B. (1944). Henry Neville Dixon. *The Bryologist* **47**, 137–144.
- Bartram, E.B. (1946). New mosses from Tierra del Fuego. *Farlowia* **2**, 309–319.
- Belli, G., Picca, A.M. and Quaroni, S. (2004). Plant pathology in Lombardy: initial steps and subsequent developments. *Journal of Plant Pathology* **86**(4), 295.
- Blackeel, T.L. (1990). The genus *Hennediella* Par.: a note on the affinities of *Tartula brevis* Whitehouse and Newton and *T. standfordensis* Steere. *Journal of Bryology* **16**, 187–192.
- Bridel, S.-E. van (1826–27). *Bryologio universo seu systemotico od navam methodum disposita, historia et descriptio*. Volume 1. J.A. Barth: Leipzig.
- Bridel, S.-E. van (1827). *Bryologia universo seu systemotico od navam methodum disposita, historia et descriptio*. Volume 2. J.A. Barth: Leipzig.
- Britton, E.G. (1905). Notes on nomenclature IV. The genus *Neckera* Hedw. *The Bryologist* **8**, 4–6.
- Bratherus, V. (1901–05). Musci. II. Spezieller Teil, in A. Engler and K. Prantl (eds), *Die natürlichen Pflanzenfamilien* **1**(3) part I, 277–700.
- Bratherus, V. (1905–09). Musci (Laubmoose) III, in A. Engler and K. Prantl (eds), *Die natürlichen Pflanzenfamilien* **1**(3) part II, 701–1239.
- Bratherus, V. (1906). Musci amazonici et subandini Uleani. *Hedwigia* **45**, 260–288.
- Bratherus, V. (1929). *Symbolae Sinicae. Botanische Ergebnisse der Expedition der Akademie der Wissenschaften in Wien nach Südwest-China 1914/1918*. Volume 4. Springer: Vienna.
- Bratherus, V.F. and Watts, W.W. (198). The mosses of North Queensland. *Proceedings of the Linnean Society of New South Wales* **43**, 544–567.
- Brown, R. (1811). Some observations on the parts of fructification in mosses; with characters and descriptions of two new genera of that order. *Transactions of the Linnean Society, London* **10**, 312–320.
- Brown, R. (1819). Characters and descriptions of *Lyellia*, a new genus of mosses, with observations on the section of the order to which it belongs; and some remarks of *Leptostomum* and *Buxbaumia*. *Transactions of the Linnean Society, London* **12**, 560–583.
- Bruch, P., Schimper, W. and Gumbel, T. (1836–51). *Bryologia Europaea*. Volume 1. E. Schweizerbart: Stuttgart.
- Bruch, P., Schimper, W. and Gumbel, T. (1851–55). *Bryologia Europaea*. Volume 5. E. Schweizerbart: Strasbourg.
- Brummitt, R. K. and Powell, C.E. (eds) (1992). *Authors of plant names*. Royal Botanic Gardens, Kew, UK.
- Buck, W. (1979). A revision of the moss genus *Trachyphyllum* Gepp (Thuidiaceae). *Brittonia* **31**, 379–394.
- Buxbaum, J.C. (1728). *Plantarum minus cognitorum centuria II complectens plantas circa Byzantium et in Oriente observatas*. Typographia Academiae: St Petersburg.
- Cardat, J. (1909). Diagnoses préliminaires de mousses du Congo belge et de la Casamanca. *Revue Bryologique* **36**, 16–20.
- Crum, H. (1991). A partial clarification of the Lembophyllaceae. *Journal of the Hattori Botanical Laboratory* **69**, 312–322.
- Crum, H. and Anderson, L. (1981). *The mosses of eastern North America*. 2 volumes. Columbia University Press: New York.
- Crum, H. and Seppelt, R.D. (1999). *Sphagnum leucobryoides* reconsidered. *Contributions of the University of Michigan Herbarium* **22**, 29–31.
- Dalton, P. 1997. Cover page [William Anderson Weymouth 1841–1928]. *Australasian Bryological Newsletter* **36**, 1–2.
- De Lamarck, J.-B. and De Candolle, A. (1805). *Flore française*. 3rd edition. Volume 2. H. Agasse: Paris.
- Desmard, R. (1994). *Dictionary of British and Irish bryologists and horticulturists*. CRC Press: Boca Raton, USA.
- Desvaux, M. Exposition méthodique des genres de la famille des mousses pour servir de complément au travail de feu Palisot de Beauvois. *Mémoires de la Société Linnéenne de Paris* **3**, 211–228.
- De Vries, L. (1951). *French-English Science Dictionary*. Second edition. McGraw-Hill: New York.
- De Vries, L. and Jacalev, L. (1978). *German-English Science Dictionary*. Fourth edition. McGraw-Hill: New York.
- Dillen, J.J. (1741). *Historia muscarum*. Sheldonian Theatre: Oxford, UK.
- Dixon, H.N. (1912). On some mosses of New Zealand. *Journal of the Linnean Society (Botany)* **40**, 433–460.
- Dixon, H.N. (1954). *The student's handbook of British mosses*. 3rd edition (reprinted). Sumfield and Day: Eastbourne.
- Dozy, F. and Malenboer, J.H. (1846). *Musci frondosi inediti archipelagi Indici, sive descriptio et adumbratio muscarum frondosorum in insulis Javo, Borneo, Sumatra, Celebes, Amboina, (etc.)*. H.W. Hazenberg and Sac: Lugduni-Batavorum.
- Duby, J. (1873). Nouveau genre de mousses pleurocarpes propre à la Nouvelle-Calédonie. *Bulletin de la Société Botanique de France* **20**, 130–131.
- Ellis, L.T. (1985). A taxonomic revision of *Exadietyon* (Card.) (Musci: Calymperaceae). *Lindbergia* **11**, 9–37.
- Endlicher, S.F.L. (1836–41). *Genera plantarum*. Fr. Beck Universitatis: Vienna.
- Enrath, J. (1991). Notes on the Neckerales (Musci). 10. The taxonomic relationships of *Pinnetella moriei*, with the description of *Caducella*. *Journal of Bryology* **16**, 611–618.
- Erhart, Friedrich (1877). *Beiträge zur Naturkunde, und den damit verwandten Wissenschaften*. Volume 1. Schmidt'schen Buchhandlung: Hannover & Osnabrück.



- Fenzl, E. (ed.) (1870). *Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair. Botanischer Theil, Volume I. Part II. Clossis Musci frondosi*. Karl Gerold's Sohn: Wien, Austria.
- Fife, A. (1985). A generic revision of the Funariaceae (Bryophyta: Musci) Part I. *Journal of the Hattori Botanical Laboratory* 58, 149–196.
- Fife, A. (1995). Checklist of the mosses of New Zealand. *The Bryologist* 98, 313–337.
- Fleischer, M. (1905–06). Neue Familien, Gattungen und Arten der Laubmoose. *Hedwigia* 45, 53–87.
- Fleischer, M. (1908). *Die musci der flora van Buitenzorg* 3. E.J. Brill: Leiden.
- Fleischer, M. (1923). *Die musci der flora van Buitenzorg* 4. E.J. Brill: Leiden.
- Fleming, M. and Barneby, R. (1964). Treasures of the Garden's herbarium. III. The bryophytes of William Mitten. *Journal of the New York Botanical Gardens* 14, 146–148.
- Flora of Australia (2006). *Flora of Australia. Volume 51: Mosses*. ABRIS and CSIRO: Canberra.
- Florschütz, P.A. (1970). Introduction to Hedwig's "Species Muscorum", in J. Hedwig, *Species muscarum frondosorum* (facsimile edition), pp. v–xxii. H.R. Engelmann (J. Cramer): Weinheim.
- Frahm, J.-P. and Eggers, J. (2001). *Lexikon deutschsprachiger Bryalagen*, Books on Demand GmbH (BoD), Norderstedt.
- Godley, E.J. (1970). Botany of the Southern Zone: exploration 1847–1891. *Tuotora* 18, 49–93.
- Godley, E.J. (1997). Biographical Notes (27). Thomas George Wright (1831–1914). *New Zealand Botanical Society Newsletter* 49, 19–21.
- Gray, S.F. (1821a). *A natural arrangement of British plants. Volume I*. Baldwin, Cradock & Joy: London.
- Gray, S.F. (1821b). *A natural arrangement of British plants. Volume II*. Baldwin, Cradock & Joy: London.
- Grummann, R. (1962). Biographisches zu Wickers = Wiggers (1746–1811) und Weisz = Weis (1744–1826). *Taxa* 11, 167–170.
- Greville, R.K. and Arnott, G.A. (1823–24). A new arrangement of the genera of mosses, with characters, and observations on their distribution, history, and structure. *Memoirs of the Wernerian Natural History Society* 5, 42–89.
- Haller, A. von (1742). *Enumeratio methodica stirpium Helvetiae indigenarum*. Abraham Vandenhoek: Göttingen.
- Hampe, E. (1837). Musci frondosi Germaniae ad methodum naturalem dispositi. *Flora* 1837: 273–287.
- Hampe, E. (1839). Relation über die von dem Residenden C. Beyrich auf seiner letzten Reise in Nordamerika gesammelten Laubmoose. *Linnaea* 13, 39–48.
- Hampe, E. (1847). Ein Referat über die Columbischen Moose, welche von Herrn Moritz gesammelt wurden. *Linnaea* 20, 2–64.
- Hampe, E. (1860). Muscorum frondosorum Florae Australiae, auctore Dr. Ferd. Müller mox edendae, species novas prepondit E. Hampe. *Linnaea* 30, 623–646.
- Hampe, E. (1865). *Prodromus Florae Novo-Granatensis. Musci. Annales des Sciences Naturelles (Botanique), série 5, 4, 324–377*.
- Hampe, E. (1867). *Ditrichum* Timm. statt *Leptotrichum* Hpe. *Flora* 50, 181–182.
- Hampe, E. (1880). Musci frondosi Australiae continentalis, praesertim e Baronis de Mueller collectionibus. *Fragmento Phytographiae Austrolioe* 11 (supplement), 45–52.
- Hedenäs, L. (1993). A generic revision of the Warnstorfia-Calliergon group. *Journal of Bryology* 17, 447–479.
- Hedenäs, L. (1997). A partial generic revision of *Campyllum* (Musci). *The Bryologist* 100, 65–88.
- Hedwig, J. (1787). *Descriptio et adumbratio micrascapica-analytico muscarum frondosum. Volume 1*. J.G. Müller: Leipzig.
- Hedwig, J. (1801). *Species muscarum frondosum*. J. Ambrosius: Leipzig.
- Hooker, J.D. (1844–60). *The botany of the Antarctic voyage of HM Discovery Ships Erebus and Terror in the years 1839–1843*. 3 volumes. Lovell Reeve: London.
- Hooker, J. D. (1867). *Handbook of the New Zealand flora. II. Musci*. Lovell Reeve: London.
- Hooker, J.D. (1890). *Icnes plantarum. Series 3. Volume 3*. Longman et al.: London.
- Hooker, J.D. and Wilson, W. (1844). Musci Antarctica. *London Journal of Botany* 3, 533–556.
- Hooker, W. J. (1830). *Spiridens reinwardtii*. *Botanical Miscellany* 1, 1–2.
- Hooker, W. J. (1840). *Icnes plantarum. Series I. Volume 3*. Longman et al.: London.
- Hooker, W.J. and Taylor, T. (1818). *Muscalagia Britannica*. Longman et al.: London.
- IHA, (2007). 'Historic Bortrom's garden'. Independence Hall Association. Accessed 30 May 2007 [<http://www.ushistory.org/tour/bartrams-garden.htm>]
- IPNI (2008). *The International Plant Names Index*. Accessed 18 March 2010. [<http://www.ipni.org>]
- Iwatsuki, Z. (1963). A revision of the east Asiatic species of the genus *Anomodon*. *Journal of the Hattori Botanical Laboratory* 26, 27–62.
- Iwatsuki, Z. (1970). A revision of *Plogiothecium* and its related genera from Japan and her adjacent areas, I. *Journal of the Hattori Botanical Laboratory* 33, 331–380.
- Iwatsuki, Z. (1987). Notes on *Isopterygium* Mitt. (Plagiotheciaceae). *Journal of the Hattori Botanical Laboratory* 63, 445–451.
- Jaeger, A. (1877). Genera et species muscorum systematice disposita seu adumbratio florum muscorum totius orbis terrarum. *Bericht über die Thätigkeit der St. Gollischen naturwissenschaftlichen Gesellschaft 1875–1876*, 201–371.
- Johnson, A. (1980). *Mosses of Singapore and Malaysia*. Singapore University Press: Singapore.
- Kayser-Petersen, J.E. (1923). Zur Geschichte der Gehirngrippe. *Journal of Neurology* 78, 272–292.

- Koponen, T. (1968). Generic revision of Mniaceae Mitt. (Bryophyta). *Annales Botanici Fennici* **5**, 117–151.
- Koperski, M. (1991). Ein Verzeichnis der beider Nomenklatur mitteleuropäischer Moosgattungen verwendeten Eihennamen. *Bryologische Rundbriefe* **7**, 1, 7.
- Lesquereux, L. and James, T.P. (1884). *Manual of the mosses of North America*. S.E. Cassino and Co.: Boston.
- Levrault, F.G. (1822). *Dictionnaire des sciences naturelles*. Tome XXIV. Jardin du Roi and École de Paris: Strasbourg.
- Limpricht, K.G. (1885–89). *Die Laubmoose Deutschlands, Oesterreichs und der Schweiz*. I. Sphagnoceae, Andreoaceae, Archidioceae, Bryineae (Cleistocarpae, Stegocarpae [Acrocarpoe]). Eduard Kummer: Leipzig.
- Limpricht, K.G. (1890–95). *Die Laubmoose Deutschlands, Oesterreichs und der Schweiz*. II. Eduard Kummer: Leipzig.
- Limpricht, K.G. (1895–1903). *Die Laubmoose Deutschlands, Oesterreichs und der Schweiz*. III. Eduard Kummer: Leipzig.
- Lindberg, S.O. (1870). Contributions to British bryology. *Journal of the Linnean Society (Botany)* **11**, 460–468.
- Linné, Carl von 1783. *A system of vegetables, according to their classes, orders, genero, species, with their characters and differences*. Volume II. (Translated from the 13th edition by a botanical society, Litchfield). Leigh & Sotheby: London.
- Little, E.L. (1941). *Bartramia* Hedwig, nomen genericum conservandum propositum. *The Bryologist* **44**, 108–111.
- Loeske, L. (1907). *Drepanocladus*, eine biologische Mischgattung. *Hedwigia* **46**, 300–322.
- Loeske, L. (1911). Zur Moosflora von Füssen und Hohenschwangau. *Hedwigia* **50**, 210–248.
- Magill, R.E. (1993). Conserved names for mosses: a brief history. *Taxon* **42**, 5–15.
- Martius, C.F.P. (ed.) (1840). *Flora Brasiliensis enumeratio plantarum in Brasilia hactenus detectarum*. Volume 1, Part 2. Monachii: Leipzig.
- McNeill, J. et al. (eds) (2006). International Code of Botanical Nomenclature (Vienna Code). *Regnum Vegetabile* **146**.
- Meagher, D. (2008). An etymology of Australian bryophyte genera. 1 – Liverworts and hornworts. *Fieldiana Botany, new series* **47**, 257–269.
- Michaux, A. (1803). *Flora Boreali-Americana: sistens caracteres plantarum quos in America septentrionali collegit et detexit Andreas Michoux*. Volume 2. Levrault Bros: Paris and Argent.
- Mitten, W. (1851). A list of all the mosses and Hepaticae hitherto observed in Sussex. *Annals and Magazine of Natural History, series 2*, **8**, 305–324.
- Mitten, W. (1859a). Musci Indiae Orientalis, an enumeration of the mosses of the East Indies. *Journal of the Proceedings of the Linnean Society* **1** (supplement), 1–171.
- Mitten, W. (1859b). Descriptions of some new species of Musci from New Zealand and other parts of the Southern Hemisphere, together with an enumeration of the species collected in Tasmania by William Archer, Esq.; arranged upon the plan proposed in the 'Musci Indiae Orientalis'. *Journal of the Proceedings of the Linnean Society* **4**, 64–191.
- Mitten, W. (1868). A List of the Musci collected by the Rev. Thomas Powell in the Samoa or Navigator Islands. *Journal of the Linnean Society (Botany)* **10**, 166–195.
- Mitten, W. (1869). Enumeratio muscorum omnium Austro-Americanorum auctori hucusque cognitorum. *Journal of the Linnean Society (Botany)* **12**, 1–659.
- Mitten, W. (1879). An account of the petrological, botanical, and zoological collections made in Kerguelen's Land and Rodriguez during the transit of Venus expeditions, carried out by order of Her Majesty's Government in the years 1874–75. II. Musci. *Philosophical Transactions of the Royal Society, London* **168**, 24–39.
- Mitten, W. and Wilson, W. (1857). Enumeration of the mosses collected in India by Dr. J. D. Hooker, F.R.S., and Dr. Thomas Thomson, F.R.S., with their habitats, elevations, and the numbers under which they have been distributed; arranged by W. Mitten, Esq., and named by W. Wilson, Esq. *Hooker's Journal of Botany and Kew Gardens Miscellany* **9**, 289–300, 321–333, 363–370.
- Montagne, J.F.C. (1845). Plantes exotiques nouvelles. *Annales des Sciences Naturelles (Botanique)*, série 3 **4**, 86–122.
- Morwood, J. and Taylor, J. 2002. *The pocket Oxford classical greek dictionary*. Oxford University Press: Oxford, UK.
- Müller, C. (1848). *Synopsis muscorum frondosorum omnium hucusque cognitorum. Part 1. Musci vegetationis Acrocarpicoe*. Alb. Foerstner: Berlin.
- Müller, C. (1851). *Synopsis muscorum frondosorum omnium hucusque cognitorum. Part 2. Musci vegetationis Pleurocarpicae*. Alb. Foerstner: Berlin.
- Müller, C. (1873). Musci Indici novi adjectis nonnullis aliis exoticis. *Linnaea* **37**, 163–182.
- Müller, C. (1874). Musci polynesiaci praesertim Vitiani et Samoani Graeffeani. *Journal des Muséum Godeffroy* **3**(6), 51–90.
- Müller, C. (1875). Musci Schweinfurthiani in itineribus duobus in Africam centalem per annos 1868–1871 collecti determinati et expositi auctore Carolo Müller. *Linnaea* **39**, 325–474.
- Müller, C. (1876). Musci Hildebrandtiani in Archipelago Comorensi et in Somalia littoris Africani anno 1875 ab J. M. Hildebrandt lecti auctore Carolo Müller Hal. *Linnaea* **40**, 225–300.
- Müller, C. (1884). Die auf der Expedition S.M.S. "Gazelle" von Dr. Naumann gesammelten Laubmoose. *Botanische Jahrbücher für Systematik Pflanzengeschichte und Pflanzengeographie* **5**, 76–88.
- Müller, C. (1889). *Die Forschungsreise S.M.S. "Gazelle" in den Jahren 1874 bis 1876 (etc.)*. IV. Botanik. Ernst Siegfried und Sohn: Berlin.
- Müller, C. (1890). Die Moose von vier Kilimandscharo-Expeditionen. *Flora* **73**, 465–499.
- Müller, C. (1896). Bryologia Hawaiica. *Flora* **82**, 434–486.
- Müller, C. (1901). *Genero muscorum frondosorum. Classes Schistocorporum, Cleistocorporum, Stegocorporum complectentia, exceptis Orthotrichaceis et Pleurocarpus*. Eduard Kummer: Leipzig.



- Nieuwland, J.A. (1917). Critical notes on old and new genera of plants. — X. *American Midland Naturalist* **5**, 50–52.
- Norris, D. H., and Robinson, H. (1981). *Stoneobryum*, a new genus of Orthotrichaceae from South Africa and southern Queensland. *The Bryologist* **84**(1), 95–99.
- Ochyra, R. (1985). *Hypnobartlettia fontana* gen. et sp. nov. (Musci: Hypnobartlettiaceae fam. nov.), a unique moss from New Zealand. *Lindbergia* **11**, 2–8.
- Ochyra, R. (1986). *Touwio laticostata*, a remarkable new genus and species of moss from Queensland, Australia. *Journal of Bryology* **14**, 103–108.
- Ochyra, R. (1990). *Streimannia turgida*, a new genus and species of Brachytheciaceae from Australia. *Journal of Bryology* **16**, 223–229.
- Ochyra, R. (1999). Nomenclatural notes on mosses: XIX. *Verrucidens* (Seligeriaceae). *Fragmento Floristica et Geobotanico* **44**, 499–502.
- O'Shea, B.J. (1997). A revision of *Aconthorrhynchium* (Sematophyllaceae) in Africa. *Tropical Bryology* **13**, 125–130.
- Palisot de Beauvois, A. (1804). Prodrome de l'Aethéogamie. I. *Magosin Encyclopédique* **5**, 1–330.
- Patterson, P.M. (1954). Discovery of *Forsstroemia ohioensis* in Virginia with an examination of the validity of the generic name. *The Bryologist* **56**, 249–256.
- Phillips, H. (1823). *Sylva florifera*. Volume 1. Longman et al.: London.
- Ramsay, H., Schofield, W.C. and Tan, B.C. (2004). The family Sematophyllaceae (Bryopsida) in Australia, Part 2. *Acroporium*, *Clostobryum*, *Macrohymenium*, *Meiotheciello*, *Meiothecium*, *Papillidiopsis*, *Rodulino*, *Rhopidorrhynchium*, *Trichosteleum* and *Warburgiella*. *Journal of the Hottori Botanical Laboratory* **95**, 1–71.
- Renauld, F. (1902). *Colliergidium* vice *Pseudo-callierygon* Ren. *The Bryologist* **4**, 64.
- Renauld, F. and Cardot, J. (1915). Histoire naturelles des plantes mousses. *Histoire Physique, Naturelle et Politique de Madagascar* **39**, 1–562.
- Robinson, H. (1975). A new name for the moss genus, *Thyridium*. *Phytologia* **32**, 432–435.
- Roth, G. (1899). Uebersicht über die Familie der Hypnaceae. *Hedwigia* **38** (suppl.), 2–8.
- Salisbury, G.O.K. (1948). *Bryobartramiaceae*, a new moss family. *The Bryologist* **51**(1), 9–13.
- Salmon, E.S. (1898). A revision of the genus *Symblephoris* Montagne. *Journal of the Linnean Society (Botany)* **33**, 486–500.
- Schimper, W. (1860). *Synopsis muscorum Europaeorum praemisso introductione de elementis bryologicis tractante*. E. Schweizerbart: Stuttgart.
- Schofield, W.B. (1992). *Some common mosses of British Columbia*. Royal British Columbia Museum: Victoria, Canada.
- Schreber, J.C.D. (1791). *Genero plantarum eorumque characteres naturales secundum numeram, figuram, situm et proportionem omnium fructificationis partium*. 8th edition. Varrentrapp and Wenner: Frankfurt.
- Schwägrichen, F. (1811). *Species muscorum frondosum. Supplement 1, Part 1(1)*. J.A. Barth: Leipzig, Paris.
- Schwägrichen, F. (1823). *Species muscorum frondosum. Supplement 2, Part 1(1)*. J.A. Barth: Leipzig, Paris.
- Schwägrichen, F. (1824). *Species muscorum frondosum. Supplement 2, Part 1(2)*. J.A. Barth: Leipzig, Paris.
- Schwägrichen, F. (1827). *Species muscorum frondosum. Supplement 3, Part 1(1)*. J.A. Barth: Leipzig, Paris, London.
- Scott, G.A.M. 1988). Studies in ancient bryology, II. Mosses to 1500 A.D. *Journal of Bryology* **15**, 1–15.
- Spence, J.R. and Ramsay, H.P. (2006). Bryaceae. *Flora of Australia* **51**, 274–348.
- Stearn, W.T. (2004). *Botanical Latin*. 4th edition. Timber Press: Portland, Oregon.
- Stone, I.G. (1976). A remarkable new moss from Queensland, Australia. *Viridivellus pulchellum* new genus and species (new family Viridivelleraceae). *Journal of Bryology* **9**, 21–31.
- Sullivant, W.S. (1856). *The Musci and Hepaticae of the United States east of the Mississippi River*. George P. Putnam and Co.: New York.
- Timm, J.C. (1788). *Prodromus florae megopolitanae*. J.G. Muller: Leipzig.
- Uichanco, L.B. (1937). Richard Crittenden McGregor. *Science, new series* **85**(2202), 255.
- Underwood, L.M. (1903). A summary of our present knowledge of the ferns of the Philippines. *Bulletin of the Torrey Botanical Club* **30**, 665–684.
- Vitt D. H., and Crosby, M.R. (1972). *Achrophyllum* — a new name for a genus of mosses. *The Bryologist* **75**, 174–175.
- Weber, F. and Mohr, D.M.H. (1807). *Botanisches Taschenbuch auf das Jahr 1807. Deutschlands Kryptogamische Gewächse. Erste Abteilung. Filices, Musci frondosi et Hepatici*. Akademischen Buchhandlung: Kiel.
- Westrin, T., Fahlstedt, E. and Söderberg, V. (eds) (1926). *Nordisk familjebok. Konversationslexikon och realencyklopedi. Volume 3B. Nordisk familjeboks förlags aktiebolag: Stockholm*.
- Wilson, W. (1846a). Remarks on the new species of Musci from Quito and Swan River, indicated by Dr. Taylor in the London Journal of Botany, Vol. V. p.41. *London Journal of Botany* **5**, 44–455.
- Wilson, W. (1846b). Remarks on some rare mosses of the Southern Hemisphere. *London Journal of Botany* **5**, 142–144.
- Wilson, W. (1854–55). Musci, in J.D. Hooker, *The Botany of the Antarctic voyage of HM Discovery Ships Erebus and Terror in the years 1839–1843. Volume II. Flora Novae-Zelandiae. Part II*, pages 57–125. J.E. Taylor: London.
- Wilson, W. (1855). *Bryological Brittonico*. Longman et al.: London.
- Wynne, F.E. (1945). Studies in *Calliergon* and related genera. *The Bryologist* **48**, 13–155.
- Zijlstra, G. (1998). Report of the Committee for Bryophyta: 4. *Taxon* **47**, 859–862.